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QUARTERLY TRUST FUND REPORT

DET RESEARCH

APRIL 1993

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U.I. DATABANK

1992 data

Average Duration	18.7 Weeks
Average Weekly Benefit Amount	\$226.31
First Payments	249,341
Claimants Exhausting Benefits	131,636

REFINANCING THE UNEMPLOYMENT INSURANCE TRUST FUND

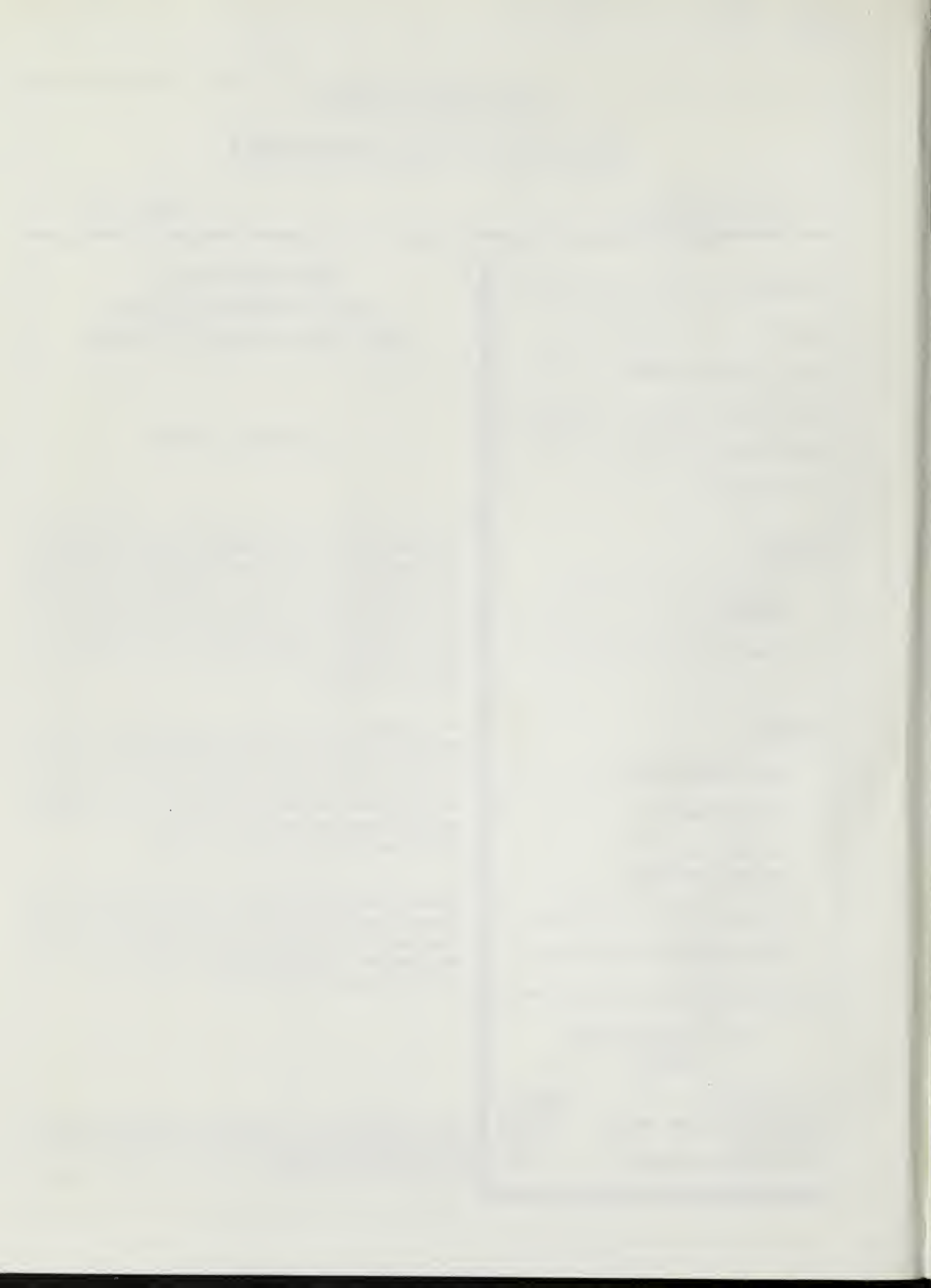
INTRODUCTION

Chapter 233 of the Acts of 1983 requires the Commissioner to file a quarterly report on the Massachusetts Unemployment Insurance Trust Fund. This report on the condition of the Massachusetts Unemployment Insurance Trust Fund incorporates, for the first time, use of the Massachusetts Benefit Financing Simulation Model, as required by Chapter 118 of the Acts of 1992. The model, designed and maintained by the U.S. Department of Labor, simulates the trust fund status over time based on varying economic assumptions.

The model can also be used to analyze changes to the state's unemployment insurance financing system, such as a new schedule of contribution rates or a change in the wage base. Access to and operation of the model is through DET's UI Actuarial Research Program. State and federal staff have worked together since last August to adapt the model to the unique features of the Massachusetts Employment and Training law.

Three economic assumptions drive the model: the annual average insured unemployment rate, the annual average percentage change in wages and salaries, and the labor force level. Input for these variables will be derived from forecasts produced by Wharton Economic Forecasting Associates (WEFA) and the New England Economic Project (NEEP).

This report is prepared by the Economic Research Service, Department of Employment and Training of Commonwealth of Massachusetts. Any questions can be directed to DET at (617) 727-6045.



CURRENT TRUST FUND CONDITION

The Massachusetts Unemployment Insurance Trust Fund balance was -\$466.1 million as of the end of February, 1993. The private contributory system account balance was -\$495.8 million, \$71.1 million lower than the previous year. The governmental contributory system account balance of \$29.7 million in February 1993 reflects an increase of \$6 million over the year.

1992 IN REVIEW

Total unemployment averaged 8.5% during 1992 while job loss was less than previously estimated. Individuals claiming regular unemployment benefits decreased during 1992, driving down the level of insured unemployment to 3.8%.

According to the Current Population Survey, however, over one third of the people unemployed during 1992 were seeking work for twenty-seven weeks or more and twenty-two percent had a current spell of unemployment of one year or longer. Many of these individuals were eligible for the federal Extended Unemployment Compensation (EUC) program. During 1992, EUC provided an additional \$715 million in benefits to Massachusetts residents who had exhausted their regular unemployment insurance claims.

In the first half of 1992, regular unemployment insurance claims activity was slightly lower than the corresponding period in 1991. Claims activity declined sharply in the second half of 1992. This lower level of claims was due in part to the extension of the federal EUC program. The extension offered individuals the option of continuing their EUC claim rather than filing a new regular claim. There was also a decline in seasonal claims as employers appear to have extended employee hours rather than adding part-time and seasonal workers.

Preliminary estimates for the second half of 1992 show total wages increasing, although employment has shown a moderate decline.

ECONOMIC ASSUMPTIONS

The assumptions for total unemployment and labor force growth used for the 1993 to 1997 outlook are the average of the Wharton Economic Forecasting Associates (WEFA) forecast and the New England Economic Project (NEEP) forecast. Massachusetts Department of Revenue (DOR) converted the total unemployment rates to insured unemployment rates for use in the simulation model. The WEFA and NEEP forecasts are used by DOR.

The current WEFA and NEEP forecasts for Massachusetts are through 1995; DET extended the 1995 trend for the last two years. Later this year, WEFA and NEEP will generate new long term forecasts. DET will incorporate the new estimates when they are available.

TRUST FUND OUTLOOK

The simulation forecasts an improvement in trust fund reserves for 1993. Income will be in excess of benefit payments for the first time in six years, increasing trust fund reserves to -\$289 million by the end of 1993. This improvement in the trust fund balance is the result of a lower level of insured unemployment for 1993, 3.1% compared to 3.8% in 1992, and an increase of .7% in covered employment. The annual average increase in covered employment will be the first in five years.

Benefit payments of \$848 million for 1993 are over 12% lower than 1992. Income estimated at \$989 million, based on Schedule D and an average contribution rate of 4.4%, is 21% higher than last year.

Trust fund solvency is restored in 1994. A 1994 year-end balance of \$245 million will be sufficient to prevent further borrowing and complete the refinancing of the fund.

The longer term outlook provides for reserves reaching the pre-recession level of over \$1 billion by the end of 1996. However, when measured as a percent of total payroll, the trust fund reserves fall short of the 1.95% level experienced in 1985 - 1987 period.

Surcharge reserves will be sufficient to meet the interest due on federal advances on September 30, 1993. Estimates of interest due September 30 for outstanding federal advances were computed by DET.

The detailed simulations are presented in table 1. Table 2 arrays the assumptions for each year, along with the other special items required by Chapter 118.



Table 1 Massachusetts Benefit Financing Simulation

Private Contributory Trust Fund Account (All \$ Millions)

	1992	1993	1994	1995	1996	1997
Balance, Jan 1	(\$279)	(\$431)	(\$290)	\$245	\$737	\$1,187
Net Income	\$817	\$989	\$1,213	\$1,174	\$1,125	\$929
Federal Recapture			\$45*			
Trust Fund Interest			\$7	\$38	\$80	\$114
Net Benefits	\$969	\$848	\$730	\$720	\$755	\$813
Balance, Dec 31	(\$431)	(\$290)	\$245	\$737	\$1,187	\$1,417
Surcharge Collections	\$53	\$37	\$4			
Interest Due On Federal Advances (Due 9/30)	\$23	\$24-29**	\$9-14**			
Schedule	"B-"	"D"	"F"	"F"	"F"	"D"

* Repayment provisions of Title XII of the Social Security Act requires employers in insolvent states to pay increased federal unemployment taxes if the state fails to repay all federal advances by November 10 of the third year of insolvency. However, 1992 federal law amendments allow for a one year delay in requiring additional FUTA taxes from employers in states which enact legislation during 1992 or 1993 to increase employer contributions by at least 25 percent over the revenue payable under the prior law. Since the U.S. Department of Labor has not yet certified that Massachusetts will qualify for the one year delay, the additional FUTA taxes are included in the 1994 calculations.

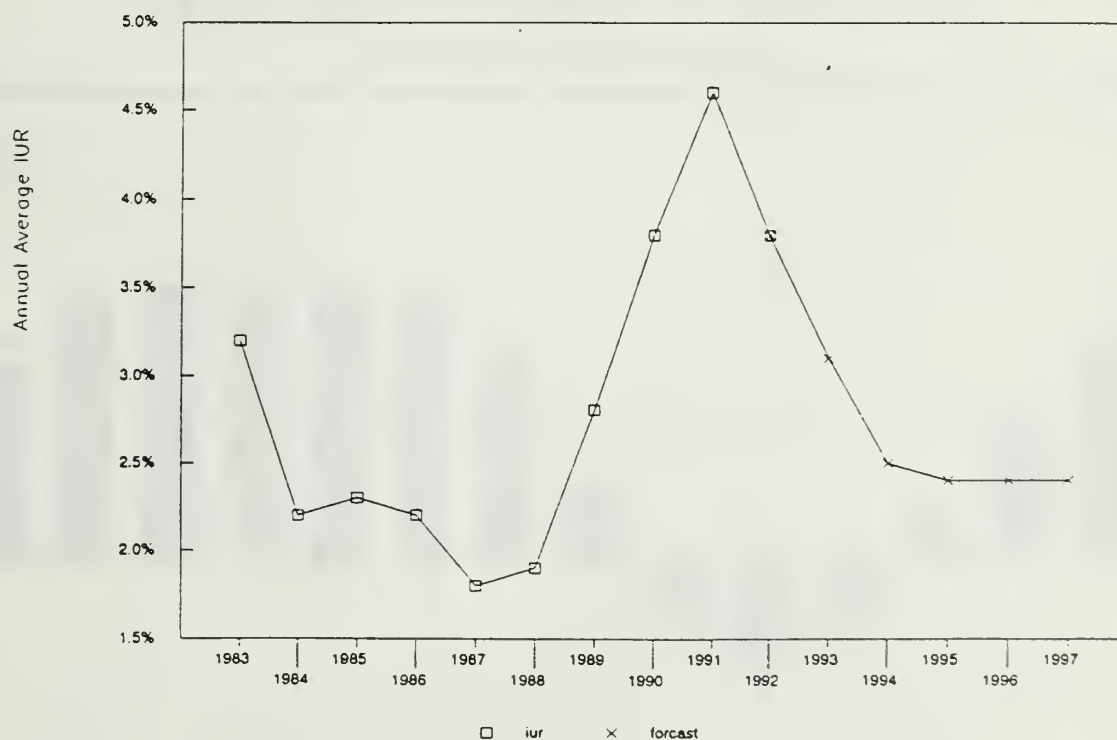
** In 1992 Massachusetts law was modified to allow employers to defer up to one-third of their first and second quarter contributions to the next calendar quarter. The high-end of the range of the interest estimate assumes the maximum one-third of contributions will be deferred.



Table 2 Economic Assumptions

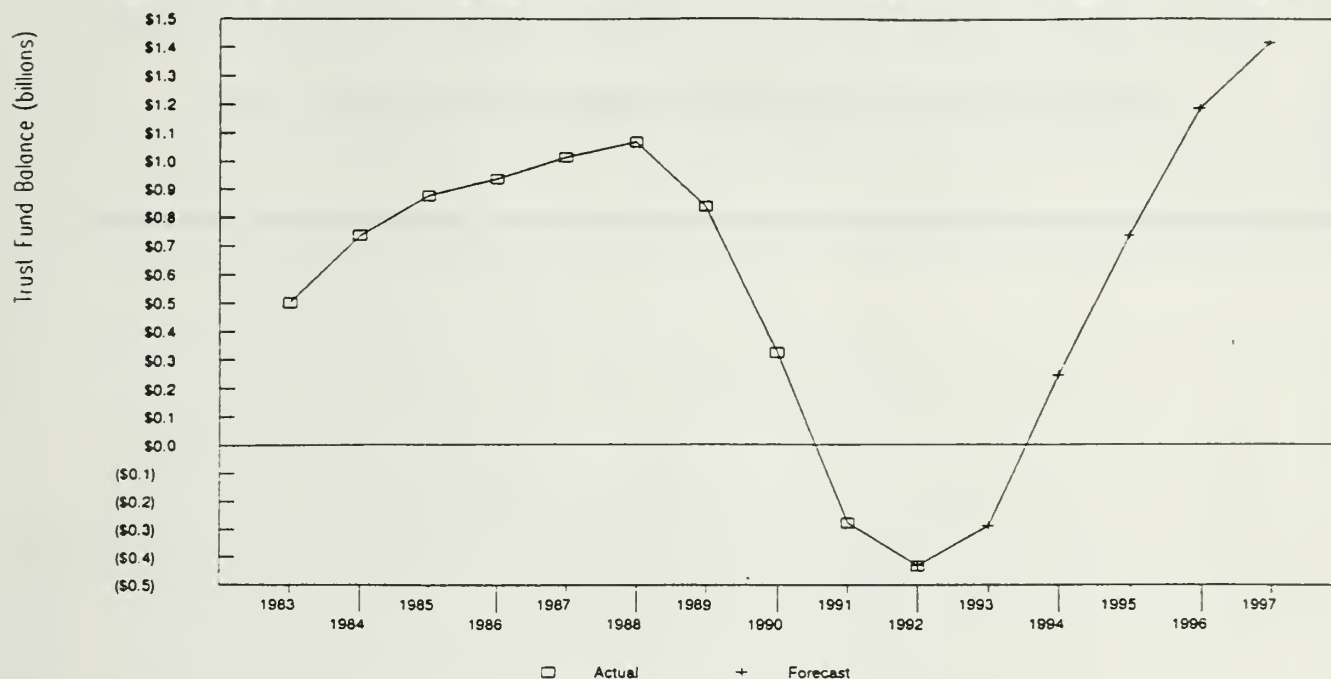
Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1992	\$61.3	\$22.5	2,668	3.6%	36.7%	2.17%	8.5%	3.8%
1993	\$62.4	\$23.3	2,686	4.4%	37.3%	1.54%	7.5%	3.1%
1994	\$66.4	\$23.8	2,717	5.2%	35.8%	1.18%	6.1%	2.5%
1995	\$70.8	\$24.4	2,748	4.8%	34.5%	1.09%	5.3%	2.4%
1996	\$75.3	\$24.9	2,776	4.5%	33.1%	0.79%	5.3%	2.4%
1997	\$80.1	\$25.4	2,801	3.6%	31.7%	0.60%	5.3%	2.4%

INSURED UNEMPLOYMENT RATE

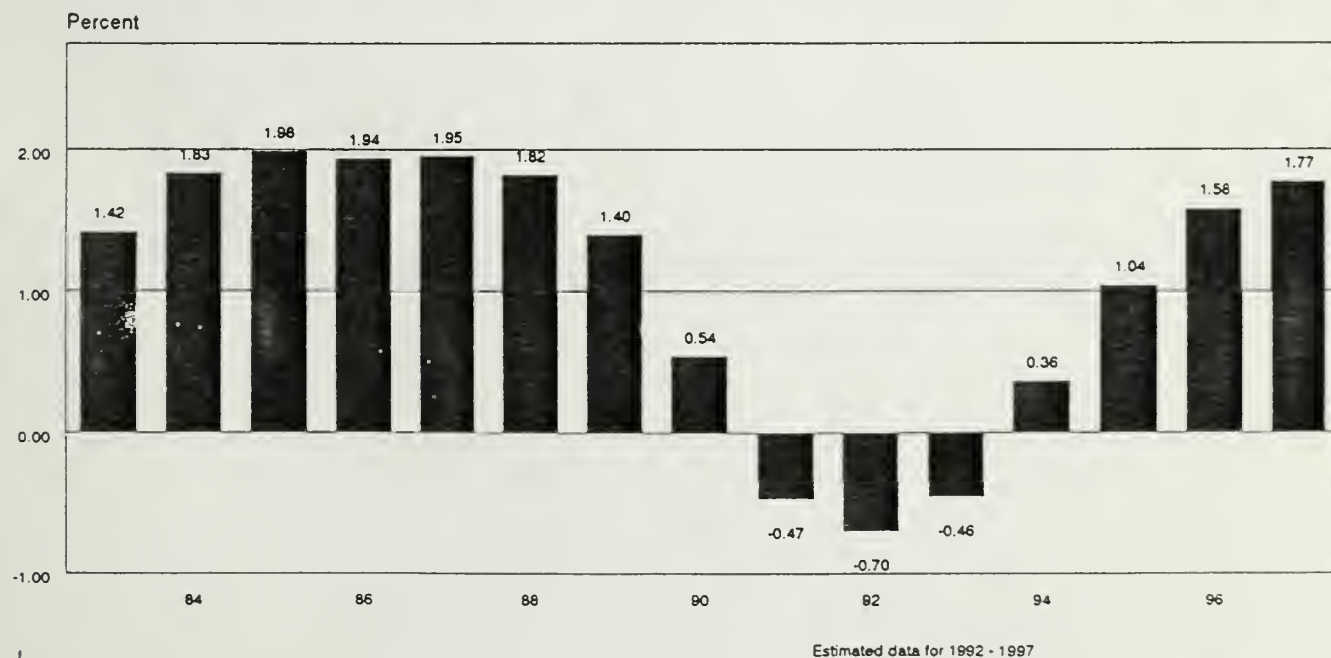




UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll



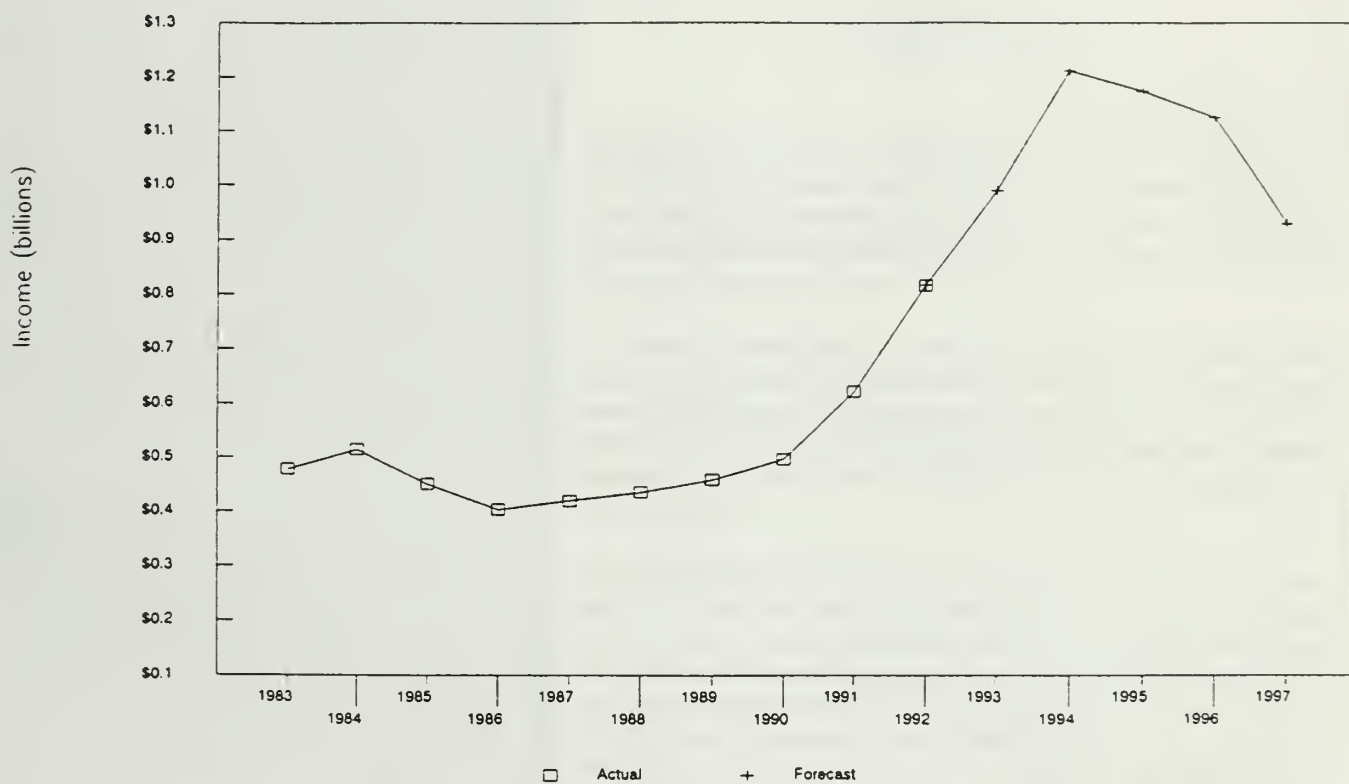


NET UNEMPLOYMENT INSURANCE BENEFITS





NET UNEMPLOYMENT INSURANCE INCOME



QUARTERLY TRUST FUND REPORT

DET RESEARCH

AUGUST 1993

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U.I. DATABANK

1992 data (preliminary)

Average Annual Wages

All Industries	\$29,651
Construction	\$32,998
Manufacturing	\$36,807
Retail Trade	\$15,281
Services	\$28,759

THE UNEMPLOYMENT INSURANCE TRUST FUND MID-YEAR REVIEW

INTRODUCTION

Chapter 233 of the Acts of 1983 requires the Commissioner to file a quarterly report on the Massachusetts Unemployment Insurance Trust Fund. As required by Chapter 118 of the Acts of 1992, this report incorporates estimates generated by the Massachusetts Benefit Financing Simulation Model.

The model is maintained by the U.S. Department of Labor, with access to and operation of the model through DET's U.I. Actuarial Research Program. Federal and state analysts work together on an ongoing basis to adapt the model to the unique features of Massachusetts' Employment and Training law as well as the Massachusetts economy.

The Massachusetts Benefit Financing Simulation relies on three inputs to drive forecasts: the labor force level; annual average percent change in wage and salary disbursements; and the annual average insured unemployment rate. For the labor force and wage and salary disbursements, DET used forecasts produced by The New England Economic Project (NEEP) and Wharton Economic Forecasting Associates (WEFA). DET derived the insured unemployment rate from the total unemployment rate based on the NEEP and WEFA forecasts. DET is working with the U.S. Department of Labor to modify the model to use the total unemployment rate as an input.

This forecast uses the latest available short term and long run outlooks released by NEEP and WEFA.

This report is prepared by the Economic Research Service, Department of Employment and Training of Commonwealth of Massachusetts. Any questions can be directed to DET at (617) 727-6045.

CURRENT CONDITION OF THE FUND

The Massachusetts Unemployment Insurance Trust Fund Balance was -\$188 million as of the end of July 1993. The private contributory account balance was -\$224 million, an improvement of \$133 million as compared to the balance at the end of July 1992. The government contributory system account balance at the end of July 1993 was \$36 million, an increase of \$10 million over July 1992.

COMPARISON OF FORECASTS

Compared to the forecasts used for the April Trust Fund Report, the revised NEEP and WEFA forecasts are slightly more pessimistic, with higher expected overall unemployment rates and slower long term growth in the labor force but with both forecasts estimating higher rates of growth in wages and salaries. The values used as input for the Benefit Financing Simulation in April and August are compared below.

	Wage and Salary Growth (%)		Labor Force (000)	
	4/93	8/93	4/93	8/93
1993	4.0	4.5	3,122.0	3,119.1
1994	5.1	5.8	3,138.5	3,150.5
1995	5.3	5.8	3,169.3	3,171.6
1996	5.3	5.7	3,200.4	3,188.6
1997	5.3	5.8	3,231.8	3,205.3

	Total Unemployment Rate (%)		Insured Unemployment Rate (%)	
	4/93	8/93	4/93	8/93
1993	7.5	7.5	3.1	2.7
1994	6.1	7.0	2.5	2.8
1995	5.3	6.7	2.4	2.6
1996	5.3	6.2	2.4	2.5
1997	5.3	5.8	2.4	2.4

1993 OUTLOOK

The Massachusetts total unemployment rate continued to decline in the first seven months of 1993. At the end of July, the year to date average rate stood at 6.8 % compared with 8.4 % for the same period last year.

Benefit payments are expected to be \$748 million based on an insured unemployment rate (IUR) of 2.7% for 1993, down from 3.8% in 1992.

The level of claims activity has continued to decline with the improving unemployment picture. A portion of the improving claims situation may be attributed to changes in Massachusetts' and federal law. Massachusetts law reduces the maximum length of regular program eligibility from 30 to 26 weeks when a federal extension is in place.

The extension of the Federal Emergency Unemployment Compensation (EUC) program is estimated to save the Massachusetts trust fund \$60 to \$90 million during 1993 and to reduce the annual average IUR by .4%. EUC savings result both from the reduction to a 26 week program for the regular U.I. program and from a provision which allows individuals filing a new claim for regular program benefits the option to revert to an existing EUC claim. Since January approximately 21,500 claimants have filed for EUC instead of U.I., reducing the claims load by 4,500 a week. Shortening program eligibility to 26 weeks through October 1993 is reducing claims by 4,000 a week.

First quarter revenues of \$509 million were \$23 million higher than the April model forecast, reflecting a higher average contribution rate than was previously estimated. Contributions for 1993 are now estimated to be \$995 million.

The estimated \$748 million in benefit payments and \$1 billion in contributions result in an estimated trust fund balance of -\$184 million for the year ending 1993.

Revenues from the special surcharge will be sufficient to pay the \$24-25 million in interest due by September 30, 1993.

RECAPTURE OF FEDERAL ADVANCES

Repayment provisions of Title XII of the Social Security Act requires employers in insolvent states to pay increased federal unemployment taxes (FUTA) if the state fails to repay all federal advances by November 10th of the third year of insolvency. Massachusetts is projected to meet this condition in 1993, requiring the Massachusetts employers' FUTA tax due in January 1994 to increase by .3% (or \$21 per employee). However, 1992 amendments to federal law allow states that increase revenue by at least 25%, through law changes enacted during 1992 and 1993, to defer the FUTA increase for one year. It is projected that we will also meet this condition.

Estimated contributions for 1993 meet the 25% increase because Chapters 26 and 118 of the Acts of 1992 increased revenues through a new schedule of contribution rates and a higher contributory base. Prior to September 1, 1993 DET will be applying to the U.S. Department of Labor for a deferral in the FUTA recapture for 1993. This deferral would allow Massachusetts employers to avoid \$45 million in additional 1993 federal taxes payable in January 1994.

Under current projections, the Massachusetts trust fund will be solvent in May, 1994, avoiding any FUTA re-

capture. If on November 10, 1994 the trust fund should not be solvent and 1994 contributions are not at least 25% above the contributions due under prior law, then the FUTA recapture may be .6% (or \$42 per employee) payable in January 1995.

FIVE YEAR OUTLOOK

The model estimates for 1993 through 1997 show minor changes over the five year period from the previous forecast. At the end of the five year forecasting period in 1997, the fund is projected to have a balance of \$1.5 billion.

The model projects that total contributions and benefit payments from 1993 through 1997 will be about the same as the April estimates with a slight change in the distribution of contributions among years. Benefit payments, revised down for 1993, are estimated to be slightly higher in other years.

Table 1 **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

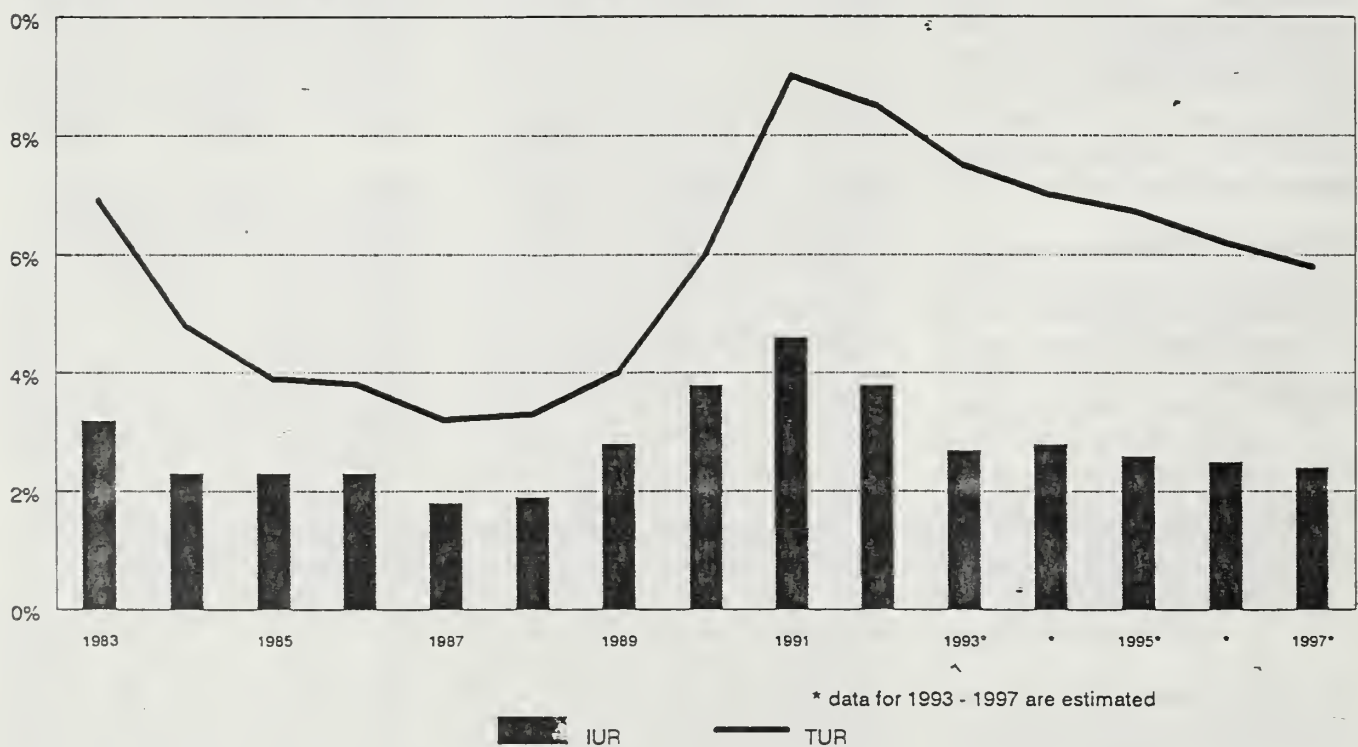
	1992	1993	1994	1995	1996	1997
Balance, Jan 1	(\$279)	(\$431)	(\$184)	\$272	\$749	\$1,229
Net Income	\$817	\$995	\$1,227	\$1,195	\$1,144	\$916
Federal Recapture						
Trust Fund Interest			\$10	\$41	\$84	\$121
Net Benefits	\$969	\$748	\$781	\$759	\$748	\$760
Balance, Dec 31	(\$431)	(\$184)	\$272	\$749	\$1,229	\$1,506
Surcharge Collections	\$53	\$30	\$5			
Interest Due On Federal Advances (Due 9/30)	\$23	\$24.3-25.3*	\$5-\$8.5*			
Schedule	"B-"	"D"	"F"	"F"	"F"	"D"

* In 1992 Massachusetts law was modified to allow employers to defer up to one-third of their first and second quarter contributions to the next calendar quarter. The high-end of the range of the interest estimate assumes that fifteen percent of contributions will be deferred.

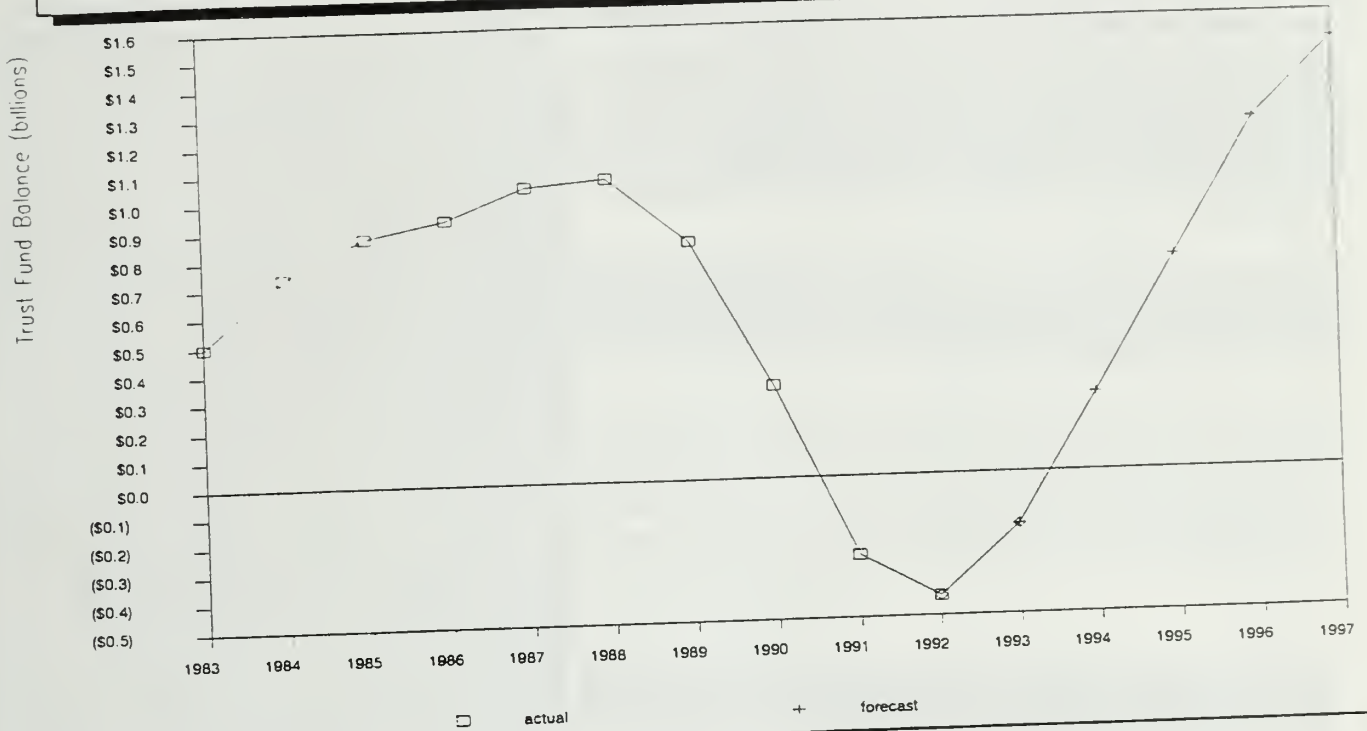
Table 2 Economic Assumptions

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1992	\$61.8	\$22.5	2,675	3.6%	36.7%	2.17%	8.5%	3.8%
1993	\$63.9	\$22.7	2,726	4.5%	35.5%	1.58%	7.5%	2.7%
1994	\$69.3	\$23.6	2,721	5.3%	34.1%	1.30%	7.0%	2.8%
1995	\$73.9	\$24.2	2,744	4.9%	32.7%	1.08%	6.7%	2.6%
1996	\$78.5	\$24.7	2,763	4.6%	31.5%	0.87%	6.2%	2.5%
1997	\$83.5	\$25.1	2,778	3.5%	30.1%	0.67%	5.8%	2.4%

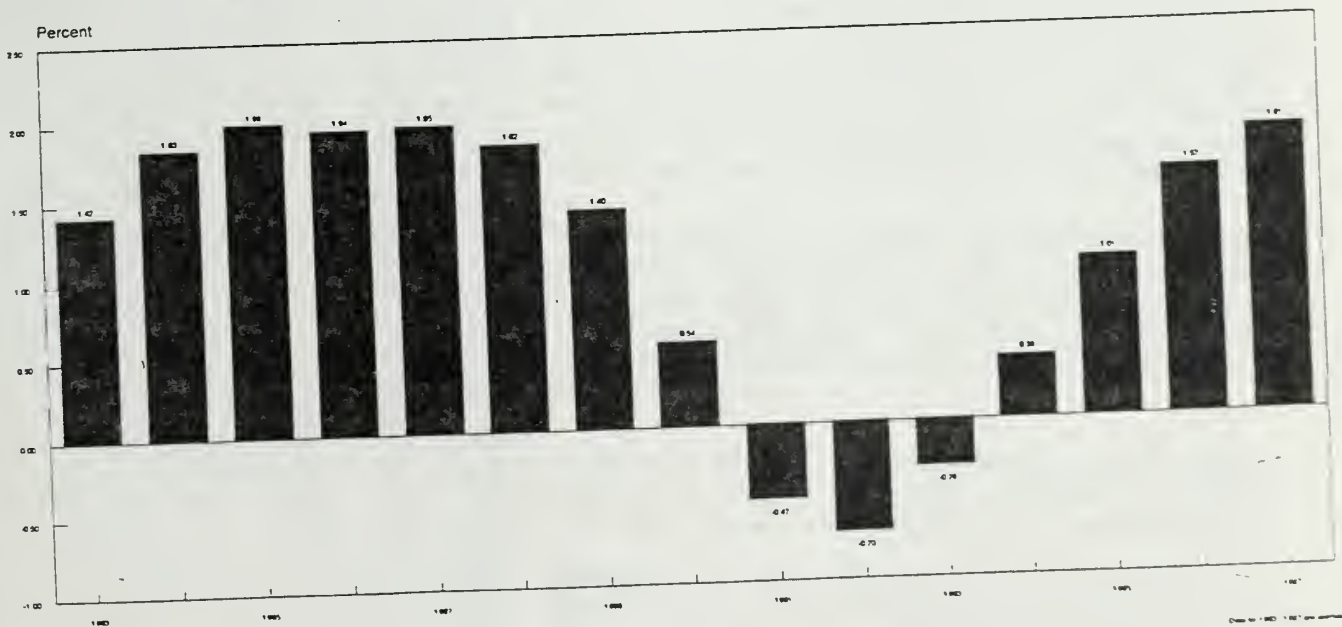
INSURED VS. TOTAL UNEMPLOYMENT RATES



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll





QUARTERLY TRUST FUND REPORT

MAY 15 1995

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DET RESEARCH

OCTOBER 1993

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U.I. DATABANK

U.I. Maximum
Weekly Benefit Amount

Effective October	
1993	\$325
1992	\$312
1991	\$296

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of August 1993 the Massachusetts Unemployment Insurance Trust Fund Balance stood at -\$113 million. The private trust fund account balance was -\$149 million, an improvement of \$134 million over the same time last year. The government contributory account balance was \$36 million, an improvement of \$11 million over the prior year.

COMPARISON OF FORECASTS

For this outlook the economic forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in June of 1993 is being utilized. This 1993 through 1995 forecast has been updated by the Massachusetts Department of Revenue to reflect actual data through August 1993. The 1996 and 1997 forecasts are based on the March WEFA long-term outlook. The Massachusetts Benefit Financing Simulation has also been updated with actual claims and contributions activity data for the first and second quarters of 1993, as well as employment and wage data for the first quarter of 1993.

The following assumptions are included in this model: contribution rate schedule "F" will be in effect for 1994, as required by Chapter 118 of the Acts of 1992; employers will defer fifteen percent of the contributions due in April and July; and the loss of FUTA credit for Massachusetts employers is delayed in 1994 and not applicable in 1995 for 1994 wages.

The Massachusetts Benefit Financing Simulation has been updated to allow the use of the total unemployment rate as an input variable rather than the insured unemployment rate. This eliminates the



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need to separately forecast an insured unemployment rate. The insured unemployment rates displayed below are, therefore, a result rather than an input variable. The insured unemployment rate for 1993 has been adjusted to take into account the experience of the federal Emergency Unemployment Compensation (EUC) program.

The updated WEFA forecast and its impact on the economic assumptions used in the October simulations as compared to the August forecast are arrayed below:

	Wage & Salary Growth (%)		Labor Force (000)	
	8/93	10/93	8/93	10/93
1993	4.5	4.4	3,119.1	3,150.4
1994	5.8	5.8	3,150.5	3,166.6
1995	5.8	5.6	3,171.6	3,192.1
1996	5.7	5.0	3,188.6	3,209.4
1997	5.8	4.8	3,205.3	3,227.7

	Total Unemployment Rate (%)		Insured Unemployment Rate (%)	
	8/93	10/93	8/93	10/93
1993	7.5	6.8	2.7*	2.6*
1994	7.0	6.1	2.8	3.1
1995	6.7	5.9	2.6	3.1
1996	6.2	5.2	2.5	2.8
1997	5.8	4.9	2.4	2.7

* the insured unemployment rate for 1993 has been adjusted to take into account the availability of benefits under the EUC program.

Compared to the August trust fund forecast the updated WEFA forecast shows the total unemployment rate declining faster and the labor force growing more rapidly. Wage and salary growth remains roughly the same through 1995, but slows in 1996 and 1997. The insured unemployment rates derived from the model are higher than those used in the August forecast.

1993 OUTLOOK

The Massachusetts unemployment rate continues to be below last year's level. Through September, the average for the year stood at 6.9% compared to 8.4% for the same period last year. It is expected that the insured unemployment rate will average 2.6%, down from last year's 3.8%.

The positive effects of the federal Emergency Unemployment Compensation (EUC) program and the declining unemployment rate are contributing to a slightly lower than expected payout of \$746 million for calendar year 1993. However, with income now projected at \$979 million, the private trust fund account balance should be -\$198 million at the end of 1993.

1994 OUTLOOK

The private contributory account fund balance is estimated to become positive during 1994. Contributions for 1994 on Schedule F are projected to be \$254 million higher than 1993 revenues and exceed benefit outlays by \$387 million. Trust fund reserves should be sufficient to repay the outstanding federal advances prior to November 10, 1994, and end the year at \$195 million. See table 1.

Federal interest excise revenue already on hand will cover the expected interest payment of \$4 - \$6 million due September 30, 1994.

FIVE YEAR OUTLOOK

Reserves in the private contributory trust fund will continue to build, reaching an estimated \$892 million by the end of 1996. This balance is expected to trigger schedule "E" for 1997, resulting in reserves of \$1.2 billion by December 31, 1997.

RECOMMENDATION

The model simulations indicate that trust fund reserves should be sufficient to repay all advances prior to November 10, 1994. However, employer contributions to the fund during 1994 will rise to 1.78% of payrolls.

Therefore, it is recommended that the Legislature modify Chapter 151A to require DET to set the 1994 rates on Schedule "D". The effect on the trust fund and employers can be seen on tables 1A and 2A.

One note of caution is in order. The Massachusetts Benefit Simulation Model projects the average contribution rate, the proportion of total payroll that is contributory, the average weekly benefit amount, the average weeks compensated, covered employment and now the insured unemployment rate. Each of these variables have an impact on the forecast. If the 1994 income to the trust fund under Schedule "D" is five percent higher than forecast and the benefit payments are five percent less than the projection, the trust fund balance could be \$116 million by the end of December 1994. However, if the income is five percent lower and the benefit payments are five percent higher than forecast, the private trust fund account could have a \$-74 million balance.

Since this is the first year in which the U. S. Department of Labor forecasting model has been used to project detailed trust fund activity in Massachusetts, careful attention will be paid to each quarter's actual developments in the economy, fund income and benefit outlays.

Table 1 **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

	1992	1993	1994	1995	1996	1997
Balance, Jan 1	(\$279)	(\$431)	(\$198)	\$195	\$533	\$892
Net Income	\$817	\$979	\$1,233	\$1,197	\$1,152	\$1,024
Federal Recapture						
Trust Fund Interest			\$6	\$26	\$57	\$86
Net Benefits	\$969	\$746	\$846	\$885	\$850	\$827
Balance, Dec 31	(\$431)	(\$198)	\$195	\$533	\$892	\$1,175
Surcharge Collections	\$53	\$36	\$4			
Interest Due On Federal Advances (Due 9/30)	\$23	\$24.9	\$4-\$6*			
Schedule	"B-"	"D"	"F"	"F"	"F"	"E"

* In 1992 Massachusetts law was modified to allow employers to defer up to one-third of their first and second quarter contributions to the next calendar quarter. The high-end of the range of the interest estimate assumes that fifteen percent of contributions will be deferred.

Table 2 **Economic Assumptions**

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1992	\$61.8	\$22.5	2,675	3.6%	36.4%	2.17%	8.5%	3.8%
1993	\$63.2	\$22.9	2,710	4.4%	36.2%	1.59%	6.8%	2.6%
1994	\$69.3	\$23.6	2,728	5.3%	34.1%	1.26%	6.1%	3.1%
1995	\$73.8	\$24.0	2,749	5.0%	32.5%	1.19%	5.9%	3.1%
1996	\$78.1	\$24.5	2,770	4.7%	31.4%	1.04%	5.2%	2.8%
1997	\$82.5	\$25.1	2,791	4.0%	30.4%	0.94%	4.9%	2.7%

Net Effect Of Recommended Schedule "D" For 1994

Table 1A **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

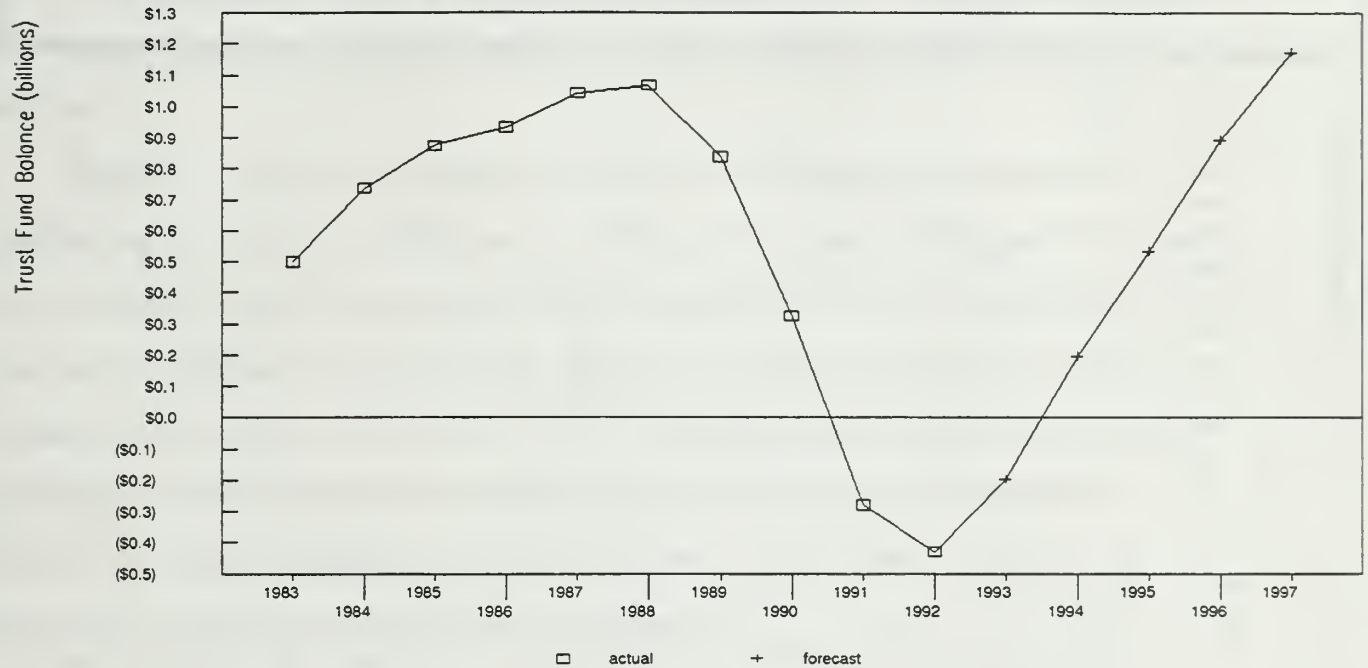
	1992	1993	1994	1995	1996	1997
Balance, Jan 1	(\$279)	(\$431)	(\$198)	\$22	\$358	\$730
Net Income	\$817	\$979	\$1,065	\$1,208	\$1,181	\$1,136
Federal Recapture Trust Fund Interest			\$1	\$13	\$41	\$76
Net Benefits	\$969	\$746	\$846	\$885	\$850	\$827
Balance, Dec 31	(\$431)	(\$198)	\$22	\$358	\$730	\$1,115
Surcharge Collections	\$53	\$36	\$4			
Interest Due On Federal Advances (Due 9/30)	\$23	\$24.9	\$4-\$6*			
Schedule	"B-"	"D"	"D"	"F"	"F"	"F"

* In 1992 Massachusetts law was modified to allow employers to defer up to one-third of their first and second quarter contributions to the next calendar quarter. The high-end of the range of the interest estimate assumes that fifteen percent of contributions will be deferred.

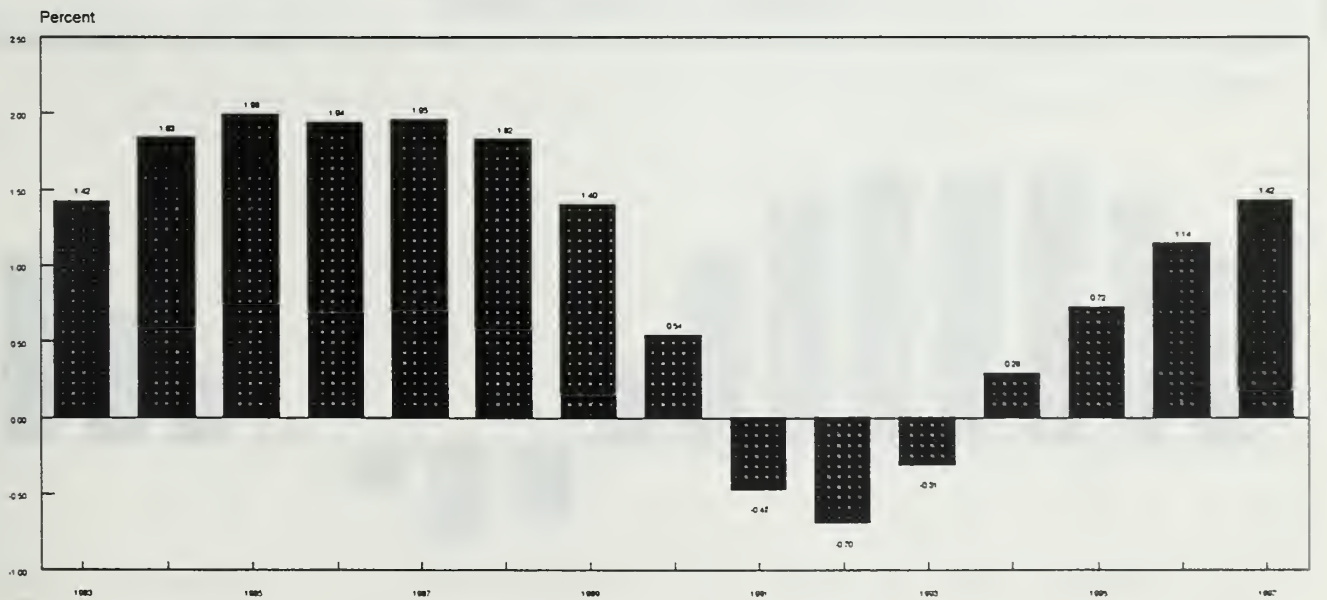
Table 2A **Economic Assumptions**

Year	Total Covered Payroll (billions)	Contri- butory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1992	\$61.8	\$22.5	2,675	3.6%	36.4%	2.17%	8.5%	3.8%
1993	\$63.2	\$22.9	2,710	4.4%	36.2%	1.59%	6.8%	2.6%
1994	\$69.3	\$23.6	2,728	4.5%	34.1%	1.27%	6.1%	3.1%
1995	\$73.8	\$24.0	2,749	5.1%	32.5%	1.24%	5.9%	3.1%
1996	\$78.1	\$24.5	2,770	4.8%	31.4%	1.10%	5.2%	2.8%
1997	\$82.5	\$25.1	2,791	4.5%	30.4%	1.00%	4.9%	2.7%

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



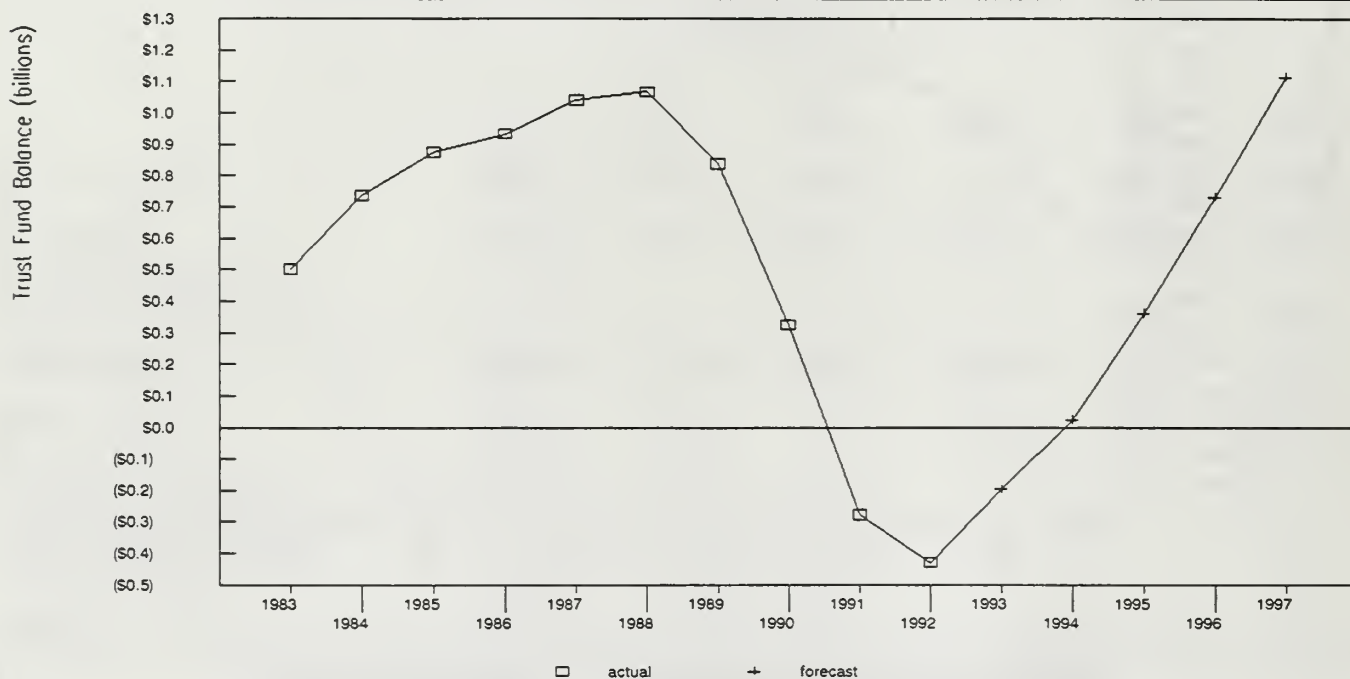
MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll



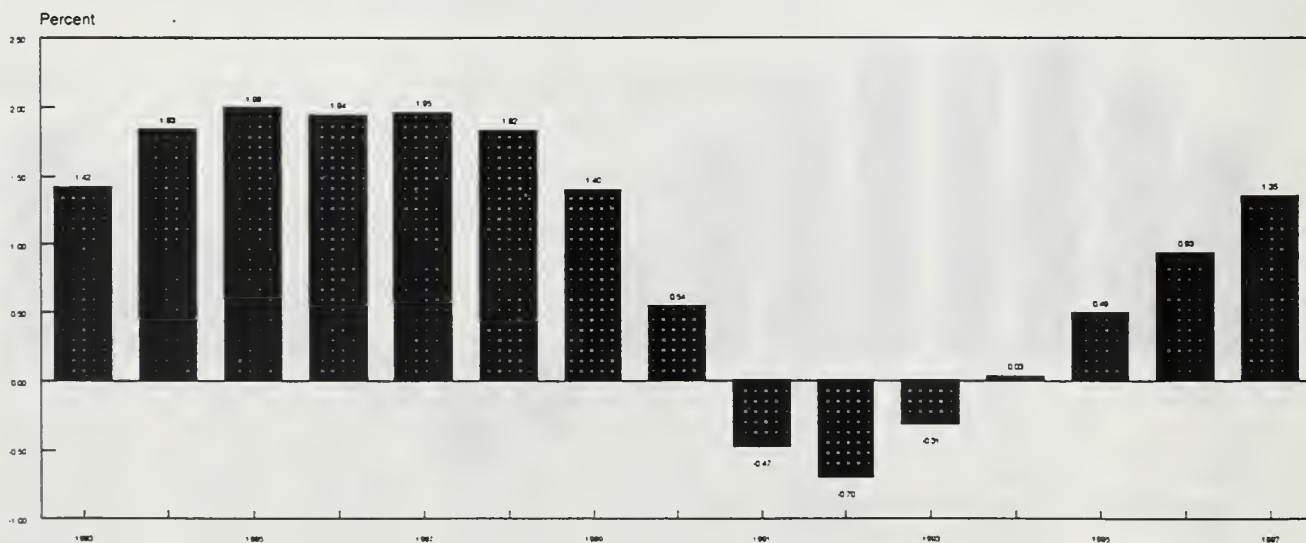
(Data for 1983-1992 are estimates)

Net Effect Of Recommended Schedule "D" For 1994

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE
Percent of Total Payroll



SECTION 1. Chapter 26 of the Acts of 1992, as most recently amended by section 3A of Chapter 118 of the Acts of 1992, is hereby further amended by striking out section 27 and inserting in place thereof the following section:-

Section 27. Notwithstanding the provisions of section fourteen of chapter one hundred and fifty-one A of the General Laws, the experience rate of an employer qualifying therefor under subsection (b) of said section fourteen of chapter one hundred and fifty-one A shall be the rate which appears in the column designated "D" for calendar year nineteen hundred and ninety-three and nineteen hundred and ninety-four, and the rate which appears in column designated "F" for calendar years nineteen hundred and ninety-five, and nineteen hundred and ninety-six.

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RESEARCH REPORT

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QUARTERLY TRUST FUND REPORT

JUL 20 1993

University of Massachusetts

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U.I. DATABANK

Annual Average
Total Unemployment Rate

1988	3.3%
1989	4.0%
1990	6.0%
1991	9.0%
1992	8.5%
1993	6.9%

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of December 1993 the Massachusetts Unemployment Insurance Trust Fund stood at -\$120 million. The private contributory account balance was -\$157 million, an improvement of \$246 million over December 1992. The governmental contributory account balance at the end of December stood at \$37 million, \$11 million more than December 1992.

1993 IN REVIEW

During 1993, Massachusetts' economy showed continuing signs of the recovery which began in the fourth quarter of 1992. Preliminary 1993 data indicate an average of 2,933,000 Massachusetts residents were employed during the year, exceeding the 1992 average of 2,862,000. Unemployment continued to decline over the year with the rate of unemployment averaging 6.9% for 1993 compared to 1992's 8.5%. The insured unemployment rate (IUR) dropped from 3.8% in 1992 to an estimated 2.6% for 1993.

The improving economy and the effects of the federal Emergency Unemployment Compensation (EUC) program held benefits paid from the private employer account in calendar year 1993 to approximately \$748 million. An average of 78,700 people claimed regular unemployment insurance benefits weekly during 1993, the lowest level in five years.

Several extensions of the EUC program limited regular unemployment insurance benefits to 26 weeks for most of 1993. This provision alone saved the Massachusetts trust fund \$40 million in calendar year 1993. Further savings resulted from a decision by 29,000 claimants to remain on EUC during 1993, rather than filing a new regular U.I. claim. The estimated savings from this option

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was \$45 million, for a total EUC-related savings of \$85 million during 1993.

Employer contributions were \$994 million during 1993, compared to \$817 million for 1992, reflecting a higher rate schedule and increases in employment and contributory wages.

ECONOMIC ASSUMPTIONS FOR 1994 to 1998 OUTLOOK

For this outlook, DET has utilized the long-term forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in October of 1993. The October 1993 quarterly outlook was also based on WEFA estimates.

The economic assumptions culled from the WEFA forecast are arrayed below and compared to the assumptions used for the October 1993 trust fund report.

Wage & Salary			Labor	
Growth (%)			Force (000)	
	10/93	1/94	10/93	1/94
1994	5.8	5.6	3,166.6	3,135.1
1995	5.6	5.6	3,192.1	3,143.0
1996	5.0	5.8	3,209.4	3,164.7
1997	4.8	5.6	3,227.7	3,181.3
1998	N.A.	5.4	N.A.	3,191.9

Total			Insured	
Unemployment	Rate (%)		Unemployment	Rate (%)
	10/93	1/94	10/93	1/94
1994	6.1	6.3	3.1	3.1
1995	5.9	6.2	3.1	3.2
1996	5.2	6.3	2.8	3.3
1997	4.9	6.4	2.7	3.3
1998	N.A.	6.3	N.A.	3.3

Compared to the prior economic forecast the October WEFA projections

are characterized by slightly higher wage and salary growth in the later years of the forecast and slower labor force growth. More significantly, the unemployment rate stabilizes around the 6.3% range rather than the decline shown in the October report. The "flat" total unemployment rate over the 1995 to 1998 period creates an insured unemployment rate that stabilizes in the 3.3% range.

1994 - 1998 OVERVIEW

The projections utilize schedule "D" for calendar year 1994, as required by Chapter 263 of the Acts of 1993, and assume that employers will defer fifteen percent of contributions due in April and July. No surcharge for interest on federal advances will be necessary during 1994. The model also includes the use of rate schedule "F" for 1995 through 1997. Chapter 118 of the Acts of 1992 requires schedule F for 1995 and 1996, and the model projects schedule F for 1997 and schedule E for 1998 based on expected reserves.

During 1994 the private contributory account is estimated to receive \$1,060 million in contributions and provide \$878 million in benefit payments. This generates a \$26 million account balance by the end of 1994.

Based on the model estimates, the overall trust fund and the private employer account will be positive in May 1994. DET estimates interest of \$4.5 - \$4.8 million will be due on September 30, 1994 for federal advances received prior to January 1, 1994. Surcharge revenues on hand are sufficient to make this payment.

Through the time frame ending in 1998, the private contributory account reserves are estimated to be \$897 million.

A NOTE OF CAUTION!

The estimates for 1994 are based on preliminary estimates for employment for the third and fourth quarters of 1993 and 1993 experience rating data. The model will be updated with the actual 1994 experience rating data in early March for use in preparing the April quarterly report. Until we have a better idea on the expected average contributory rate, caution should be exercised in using these projections. At this time, DET believes that contributions are overstated. Benefit expenditures may be overstated as well, given the current level of claims activity.

Table 1 **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)*	(\$157)	\$26	\$352	\$622	\$829
Net Income	\$994	\$1,060	\$1,223	\$1,184	\$1,127	\$1,006
Trust Fund Interest		\$1	\$14	\$38	\$59	\$73
Net Benefits	\$748	\$878	\$911	\$952	\$979	\$1,011
Balance, Dec 31	(\$157)	\$26	\$352	\$622	\$829	\$897
Surcharge Collections	\$37	\$6				
Interest Due On Federal Advances (Due 9/30)	\$24.9	\$4.5-\$4.8				
Schedule	"D"	"D"	"F"	"F"	"F"	"E"

* Reflects accounting adjustment

Table 2 **Economic Assumptions**

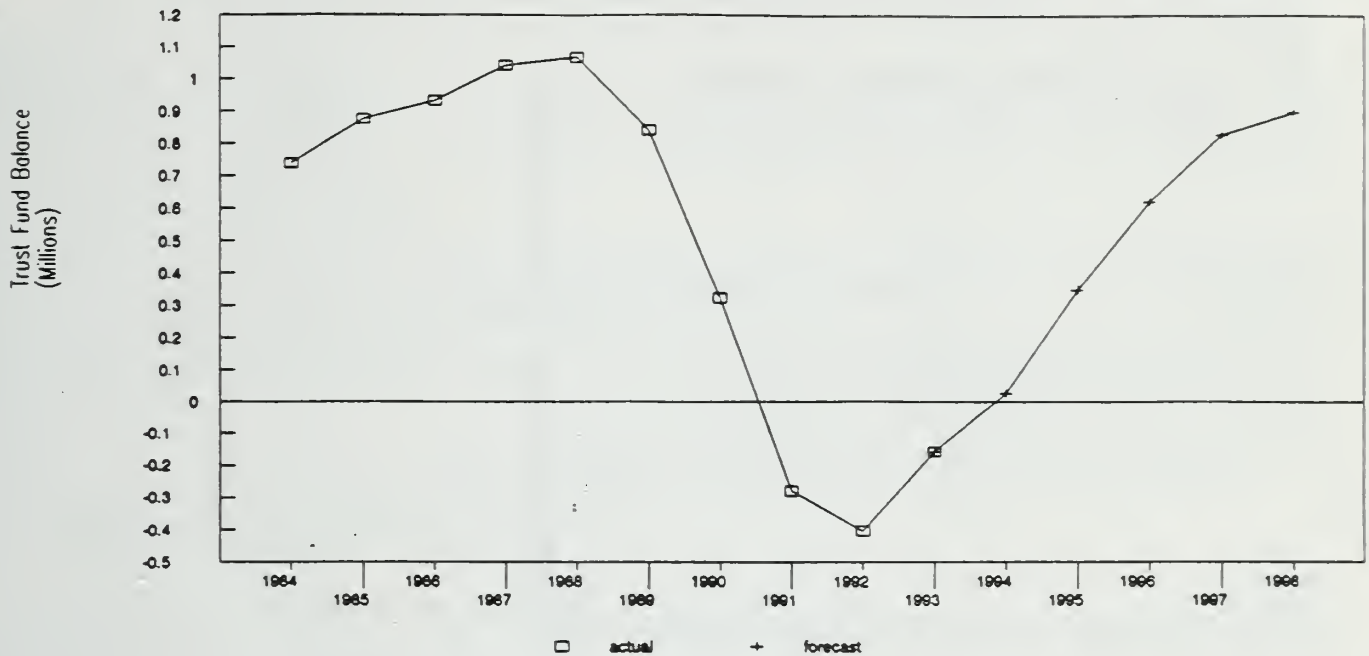
Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$62.7	\$22.9	2,719	4.3%	36.5%	1.70%*	6.9%	2.6%
1994	\$66.7	\$23.1	2,697	4.5%	34.6%	1.20%	6.3%	3.1%
1995	\$70.6	\$23.4	2,702	5.3%	33.1%	1.04%	6.2%	3.2%
1996	\$75.1	\$23.8	2,718	5.0%	31.7%	1.23%	6.3%	3.3%
1997	\$79.8	\$24.2	2,733	4.6%	30.3%	1.19%	6.4%	3.3%
1998	\$84.4	\$24.6	2,742	4.1%	29.1%	1.15%	6.3%	3.3%

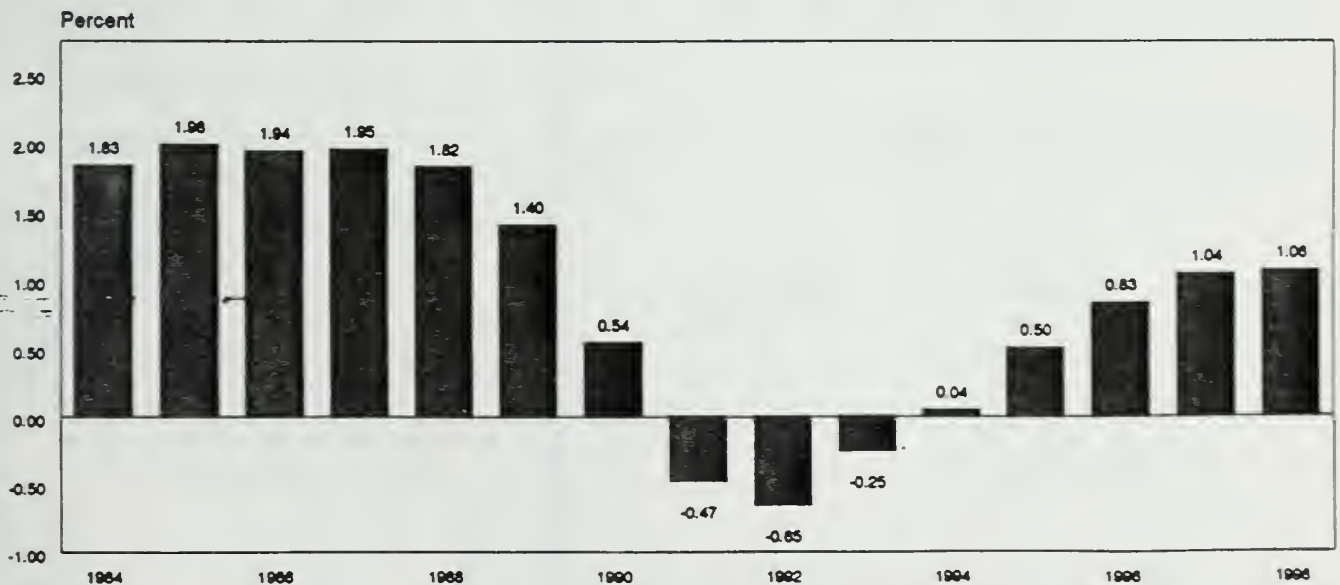
* DET actual, not model output.



UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll



Data for 1994 - 1998 are estimated



QUARTERLY TRUST FUND REPORT

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RANK OF STATESAverage Weekly Benefit Amount for
Total Unemployment CY93

STATE	AWBA
1. Hawaii	\$251.79
2. New Jersey	\$233.70
3. Massachusetts	\$233.61
4. Connecticut	\$224.02

Source: US DOL Data Summary

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of February 1994 the Massachusetts Unemployment Insurance Trust Fund stood at -\$156 million. The private contributory account balance was -\$196 million, an improvement of \$241 million over February 1993. The governmental contributory account balance at the end of February stood at \$40 million.

ASSUMPTIONS USED IN 1994 To 1998

For this forecast, DET has utilized the short-term forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in December 1993. This forecast runs through 1996 and the data has been modified by the Massachusetts Department of Revenue to reflect actual economic activity through February 1994. For the remaining years of the forecast the long-term WEFA outlook of October 1993 was used.

The assumptions from the aforementioned forecasts are displayed below and compared to the January 1994 trust fund report assumptions.

	Wage & Salary Growth (%)		Labor Force (000)	
	4/94	1/94	4/94	1/94
1994	6.8	5.6	3,139.0	3,135.1
1995	6.5	5.6	3,150.0	3,143.0
1996	6.4	5.8	3,174.2	3,164.7
1997	5.6	5.6	3,181.3	3,181.3
1998	5.4	5.4	3,191.9	3,191.9

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Total Unemployment Rate (%)			Insured Unemployment Rate (%)		
4/94	1/94		4/94	1/94	
1994	6.4	6.7	3.1	3.1	
1995	6.2	6.3	3.1	3.2	
1996	6.3	6.2	3.2	3.3	
1997	6.3	6.3	3.2	3.3	
1998	6.3	6.3	3.2	3.3	

Compared to the prior trust fund report, the outlook is characterized by higher wage and salary and labor force growth in the early years of the forecast. The projected unemployment rate stabilizes at 6.3% in the later years of the forecast with the insured unemployment rate achieving stability at 3.2%.

The forecast assumes schedule "D" for calendar year 1994 and that employers will defer twenty percent of contributions due in April and July.

1994 OUTLOOK

The Benefit Financing Simulation projects that the Massachusetts Unemployment Insurance Trust Fund will achieve solvency in calendar year 1994. The private contributory account is expected to take in \$1,078 million in contributions and pay out \$895 million in benefits. This will leave an end of year balance of \$28 million in the private contributory account.

It should be noted that the estimates that have been utilized for this outcome are based on current law and contain no actual claims or financial data for calendar year 1994. DET will be monitoring actual income and outflow data, as well as data on the volume of contributions deferred.

It is expected that there will be \$4.7 million interest due September 30, 1994 on federal advances. Interest is due September 30, 1994 on advances used between October 1, 1993 and December 31, 1993. There are sufficient funds in the federal loan interest account to cover that amount. All new advances from January 1, 1994 through early May 1994 will be interest free.

1995 - 1998 OUTLOOK

At the beginning of 1995 the private contributory account balance is estimated at \$28 million. Current law requires contribution rates to be set on schedule "F" in 1995 and 1996. The Benefit Financing Simulation projects schedule "F" in 1997, and schedule "E" for 1998, (see table 1.) Using these schedules and the economic assumptions in table 2, the private contributory account is estimated to be \$1,163 million by the end of December 1998.

AN ALTERNATE APPROACH

The Massachusetts economy has begun to recover from the long downturn that started in late 1988. Continuing job growth and a total unemployment rate of 6.5% for the first quarter of 1994 are early signs of the economy's strength.

Based on preliminary data from the first quarter of 1994 and a general consensus from economic forecasters for stronger job growth than previously forecast for 1994, DET rec-

ommends the consideration of schedule "D" for employer contributions for 1995. Schedule "D" will generate \$172 million less in contributions during 1995 and reduce the December 31, 1995 private contributory account balance to an estimated \$221 million, a reduction of \$178 million.

Regardless of the use of schedule "D" or "F" in 1995, the Benefit Financing Simulation projects schedule "F" in 1997 with a drop to schedule "E" in 1998.

Tables 1A and 2A array the outlook and economic assumptions using schedule "D" for 1995.

Table 1 **Massachusetts Benefit Financing Simulation****Private Contributory Trust Fund Account (All \$ Millions)**

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$28	\$399	\$730	\$1007
Net Income	\$994	\$1,078	\$1,248	\$1,223	\$1,176	\$1,060
Trust Fund Interest		\$2	\$18	\$49	\$76	\$97
Net Benefits	\$748	\$895	\$895	\$941	\$975	\$1,001
Balance, Dec 31	(\$157)	\$28	\$399	\$730	\$1,007	\$1,163
Surcharge Collections	\$37	\$4				
Interest Due On Federal Advances (Due 9/30)	\$24.9	\$4.7				
Schedule	"D"	"D"	"F"	"F"	"F"	"E"

Table 2 **Economic Assumptions****Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:**

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$63.4	\$22.9	2,709	4.3%	36.1%	1.70%*	6.9%	2.9%
1994	\$67.8	\$23.8	2,700	4.5%	34.9%	1.21%	6.4%	3.1%
1995	\$72.3	\$24.3	2,712	5.2%	33.4%	1.00%	6.2%	3.1%
1996	\$77.3	\$24.8	2,730	4.9%	32.1%	1.16%	6.3%	3.2%
1997	\$81.5	\$25.2	2,736	4.6%	30.9%	1.06%	6.3%	3.2%
1998	\$86.1	\$25.7	2,746	4.1%	29.8%	1.00%	6.3%	3.2%

* DET actual, not model output.

Net Effect Of Recommended Schedule "D" For 1995

Table 1A **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$28	\$221	\$546	\$834
Net Income	\$994	\$1,078	\$1,076	\$1,234	\$1,203	\$1,084
Trust Fund Interest		\$2	\$12	\$32	\$60	\$81
Net Benefits	\$748	\$895	\$895	\$941	\$975	\$1,001
Balance, Dec 31	(\$157)	\$28	\$221	\$546	\$834	\$998
Surcharge Collections	\$37	\$4				
Interest Due On Federal Advances (Due 9/30)	\$24.9	\$4.7				
Schedule	"D"	"D"	"D"	"F"	"F"	"E"

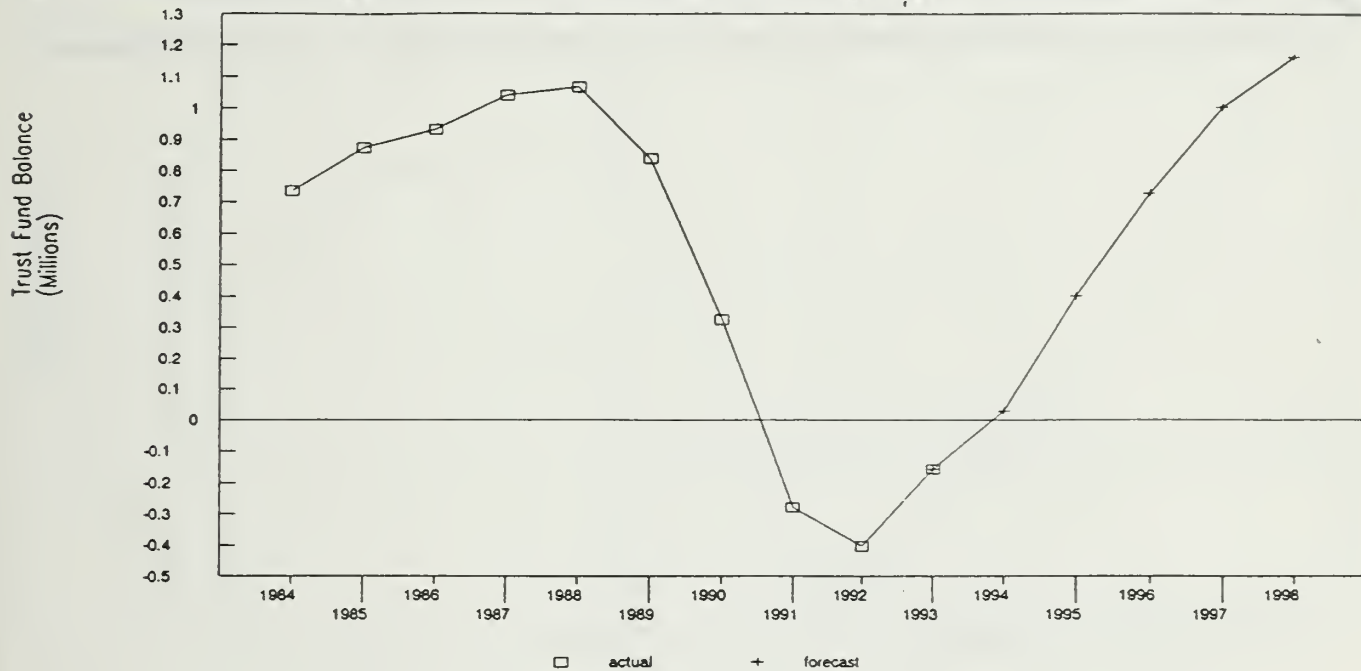
Table 2A **Economic Assumptions**

Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

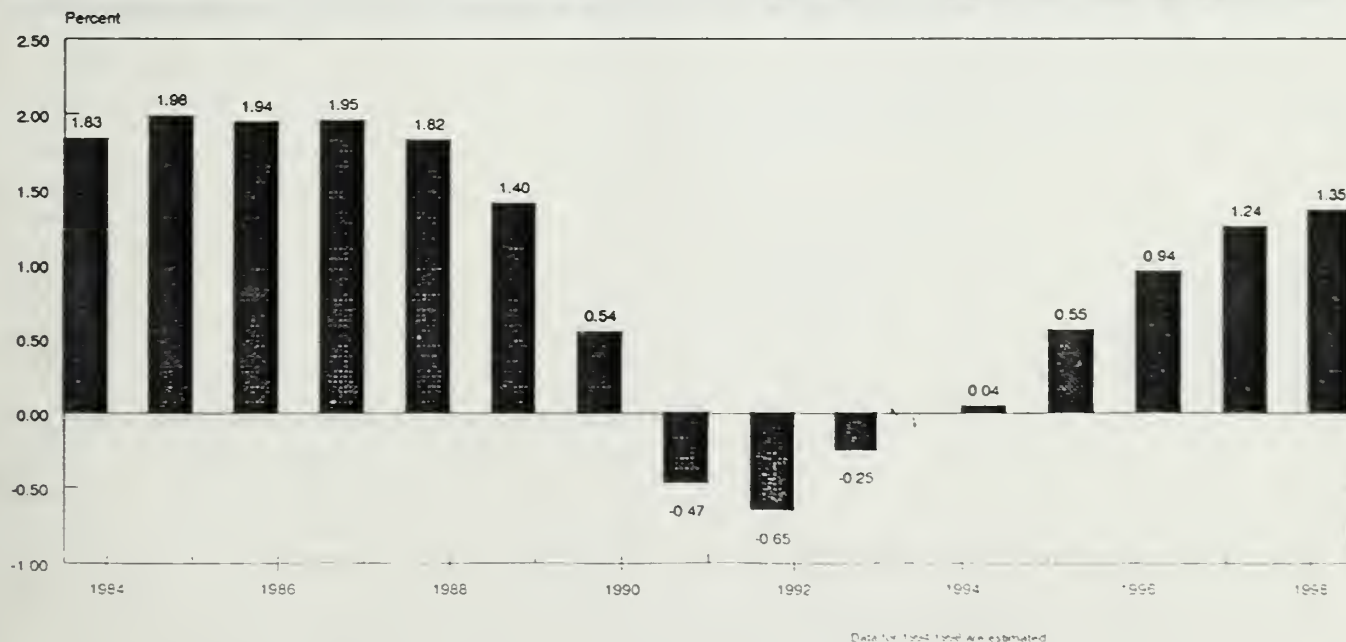
Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$63.4	\$22.9	2,709	4.3%	36.1%	1.70%*	6.9%	2.9%
1994	\$67.8	\$23.8	2,700	4.5%	34.9%	1.21%	6.4%	3.1%
1995	\$72.3	\$24.3	2,712	4.4%	33.4%	1.01%	6.2%	3.1%
1996	\$77.3	\$24.8	2,730	5.0%	32.1%	1.23%	6.3%	3.2%
1997	\$81.5	\$25.2	2,736	4.7%	30.9%	1.13%	6.3%	3.2%
1998	\$86.1	\$25.7	2,746	4.2%	29.8%	1.07%	6.3%	3.2%

* DET actual, not model output.

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll



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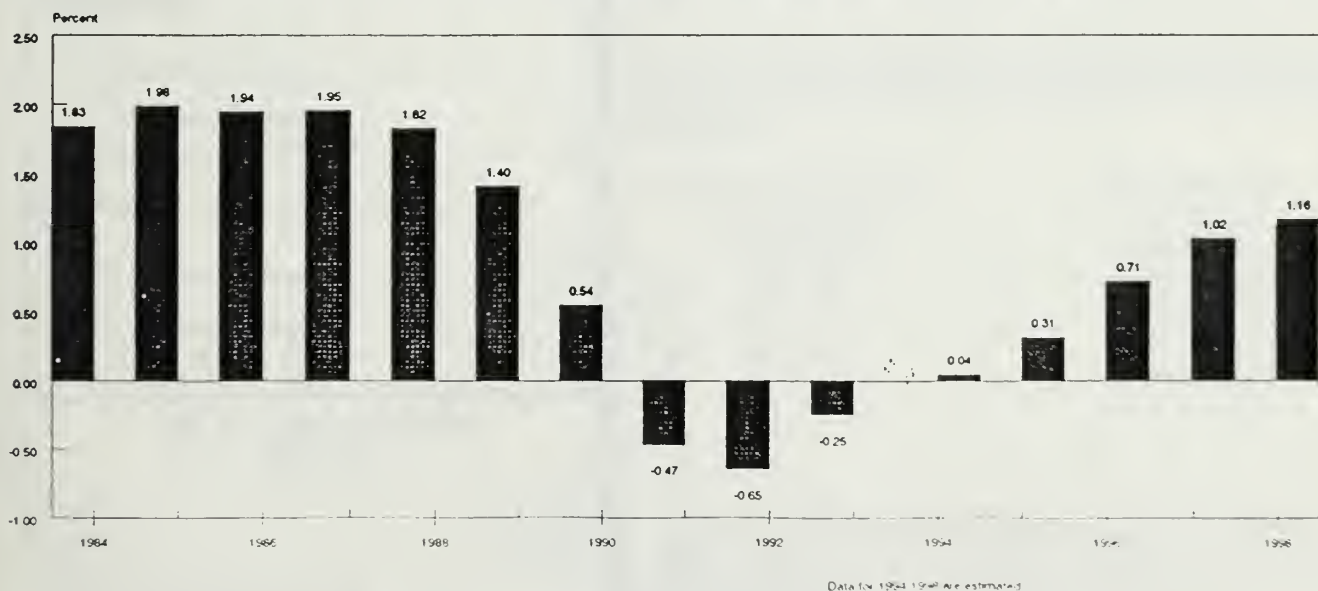
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Net Effect Of Recommended Schedule "D" For 1995

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE
Percent of Total Payroll



Data for 1984-1991 are estimated

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QUARTERLY TRUST FUND REPORT

MAY 15 1994

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AUGUST 1994

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1993 Average Weekly Wages By Industry

Services	\$555.07
Trade	\$405.79
Manufacturing	\$719.38
Preliminary, private employers only	

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of June 1994 the Massachusetts Unemployment Insurance Trust Fund balance was \$36.7 million. This balance was composed of a private contributory account balance of -\$151,000 and a governmental contributory account balance of \$36.8 million.

ASSUMPTIONS USED IN 1994 to 1998 FORECASTS

For this forecast, DET has utilized the Wharton Econometric Forecasting Associates (WEFA) spring 1994 outlook. This forecast, modified by the Massachusetts Department of Revenue to reflect actual economic activity through June 1994, runs through 1998.

The economic assumptions from the aforementioned forecast are displayed below and compared to the April 1994 trust fund report assumptions.

	Estimated Wage & Salary		Estimated Labor	
	Growth (%)		Force (000)	
	4/94	8/94	4/94	8/94
1994	6.8	5.5	3,139.0	3,160.1
1995	6.5	5.2	3,150.0	3,178.5
1996	6.4	5.5	3,174.2	3,180.1
1997	5.6	5.6	3,181.3	3,181.4
1998	5.4	5.5	3,191.9	3,192.1

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	Estimated Total Unemployment Rate (%)		Estimated Insured Unemployment Rate (%)	
	4/94	8/94	4/94	8/94
1994	6.4	6.3	3.1	3.1
1995	6.2	6.3	3.1	3.2
1996	6.3	6.2	3.2	3.2
1997	6.3	6.0	3.2	3.1
1998	6.3	6.0	3.2	3.1

Compared to the prior trust fund report, the August outlook is characterized by more moderate wage and salary growth than was forecast in the April report. Labor force growth estimates are for slightly higher growth than was forecast in April for the first three years of the forecast, but will approach the April estimates in 1997 and 1998. The projected unemployment rate stabilizes at 6.0% in the later years of the forecast which causes the insured unemployment rate to achieve stability at 3.1%.

1994 OUTLOOK

The Massachusetts Unemployment Insurance Trust Fund achieved a positive balance in May 1994. The Massachusetts Benefit Financing Simulation Model forecasts the private account to receive \$1,054 million in contributions and pay out \$838 million in benefits during calendar year 1994. This results in an end of year balance of \$60 million in the private contributory account, compared with the \$28 million balance projected in DET's April report.

This outlook reflects the following data updates: actual benefits, claims, labor force, and weekly benefit amount data for the first and second quarters of 1994. Contributions data have also been updated to reflect actual receipts for the first two quarters of 1994. Preliminary total and contributory wage data are used for the first quarter of 1994.

Employment and wage data for 1994

and later years continue to be estimated by the model. DET continues to monitor actual income and outflow data, as well as data on the volume of contributions deferred.

The estimated 1994 solvency rate, used to compute individual employer contribution rates for 1995, is probably understated. The Benefit Financing Simulation Model does not take into account the special provision which allows the reuse of wages from the first quarter of a claimant's base period during the transition to the use of wage records. Through June 30, 1994 the amount of charges of this item to the solvency account was \$25.8 million.

It is expected that there will be \$4.7 million in interest owed on federal advances, which will be due September 30, 1994. There are sufficient funds in the federal loan interest account to cover that amount.

1995 - 1998 OUTLOOK

At the beginning of 1995, according to the model, the private contributory account will have \$60 million in reserves. Current law requires that rates be set on schedule "F" in 1995 and 1996. The Benefit Financing Simulation projects schedule "F" will be in effect again in 1997 with a drop to schedule "D" in 1998. The private contributory fund is estimated to end calendar year 1998 at \$1,148 million under these conditions. The effect of this scenario is portrayed in tables 1 and 2.

STATUTORY REQUIREMENTS

Section 16 of Chapter 263 of the Acts of 1993 requires DET to notify the legislature if the private contributory account balance on December 31, 1994 is expected to be below \$9 million. Estimates produced by this Benefit Financing Simulation Model, indicate that this condition is not expected to exist.

Section 54 of Chapter 118 of the Acts of 1992 requires DET to notify the legislature if contributions for any calendar year are expected to exceed 1.75% of total wages. Based on estimates produced by the Benefit Financing Simulation Model, contributions are expected to equal 1.75% of payrolls in 1995.

RECOMMENDATION

Since Section 54 of Chapter 118 of the Acts of 1992 sets the ceiling for employer contributions at 1.75% of total payroll, and estimates from this Benefit Financing Simulation Model show this ceiling being met in calendar 1995, DET recommends that rate schedule "D" be enacted for 1995.

Schedule "D" would result in \$173 million less in contributions to the fund and cause the December 31, 1995 ending balance to end at an estimated \$237 million, a reduction of \$179 million from the estimated balance if the private contributory system remains on schedule "F" in 1995.

The use of schedule "D" in 1995, combined with the use of schedule "F" in 1996 as required by statute, will require the system to remain on schedule "F" in 1997, with a drop to schedule "E" in 1998.

The impact of legislating schedule "D" in 1995 is displayed in tables 1A and 2A.

Table 1 **Massachusetts Benefit Financing Simulation**

Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$60	\$416	\$752	\$1,062
Net Income	\$994	\$1,054	\$1,249	\$1,214	\$1,164	\$948
Trust Fund Interest		\$1	\$18	\$47	\$76	\$96
Net Benefits	\$748	\$838	\$911	\$925	\$929	\$958
Balance, Dec 31	(\$157)	\$60	\$416	\$752	\$1,062	\$1,148
Surcharge Collections	\$37	\$4				
Interest Due On Federal Advances (Due 9/30)	\$24.9*	\$4.7				
Schedule	"D"	"D"	"F"	"F"	"F"	"D"

* Paid September 30, 1993

Table 2 **Economic Assumptions**

Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$63.7	\$23.0	2,724	4.3%	36.1%	1.70%*	6.9%	2.9%
1994	\$66.9	\$23.3	2,716	4.5%	34.8%	1.24%	6.3%	3.1%
1995	\$71.4	\$24.3	2,735	5.2%	34.0%	0.87%	6.3%	3.2%
1996	\$75.2	\$24.7	2,737	4.9%	32.8%	0.90%	6.2%	3.2%
1997	\$79.2	\$25.1	2,739	4.6%	31.7%	0.84%	6.0%	3.1%
1998	\$83.7	\$25.6	2,749	3.6%	30.6%	0.75%	6.0%	3.1%

* DET actual, not model output.



Net Effect Of Recommended Schedule "D" For 1995

Table 1A Massachusetts Benefit Financing Simulation

Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$60	\$237	\$566	\$890
Net Income	\$974	\$1,054	\$1,076	\$1,224	\$1,194	\$1,062
Trust Fund Interest		\$2	\$11	\$30	\$59	\$84
Net Benefits	\$748	\$838	\$911	\$925	\$929	\$958
Balance, Dec 31	(\$157)	\$60	\$237	\$566	\$890	\$1,079
Surcharge Collections	\$37	\$4				
Interest Due On Federal Advances (Due 9/30)	\$24.9*	\$4.7				
Schedule	"D"	"D"	"D"	"F"	"F"	"E"

* Paid September 30, 1993

Table 2A Economic Assumptions

Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$71.3	\$4.3	2,724	4.3%	36.1%	1.70%*	6.9%	2.9%
1994	\$72.3	\$4.3	2,716	4.5%	34.8%	1.24%	6.3%	3.1%
1995	\$73.3	\$4.3	2,735	4.4%	34.0%	0.88%	6.3%	3.2%
1996	\$75.3	4.7	2,737	4.0%	32.8%	0.97%	6.2%	3.2%
1997	\$79.2	5.1	2,739	4.7%	31.7%	0.90%	6.0%	3.1%
1998	\$81.7	5.6	2,749	4.1%	30.6%	0.80%	6.0%	3.1%

* Based on actual 1993 economic output.

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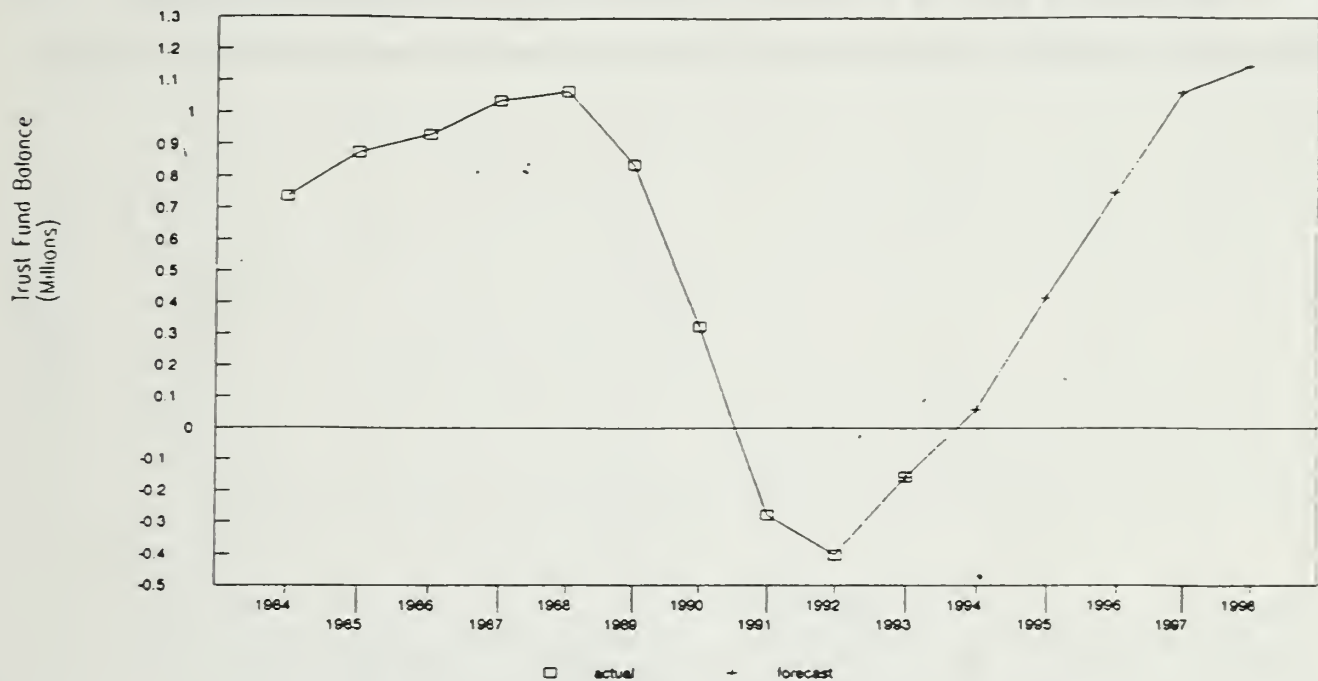
DEPARTMENT OF CHEMISTRY

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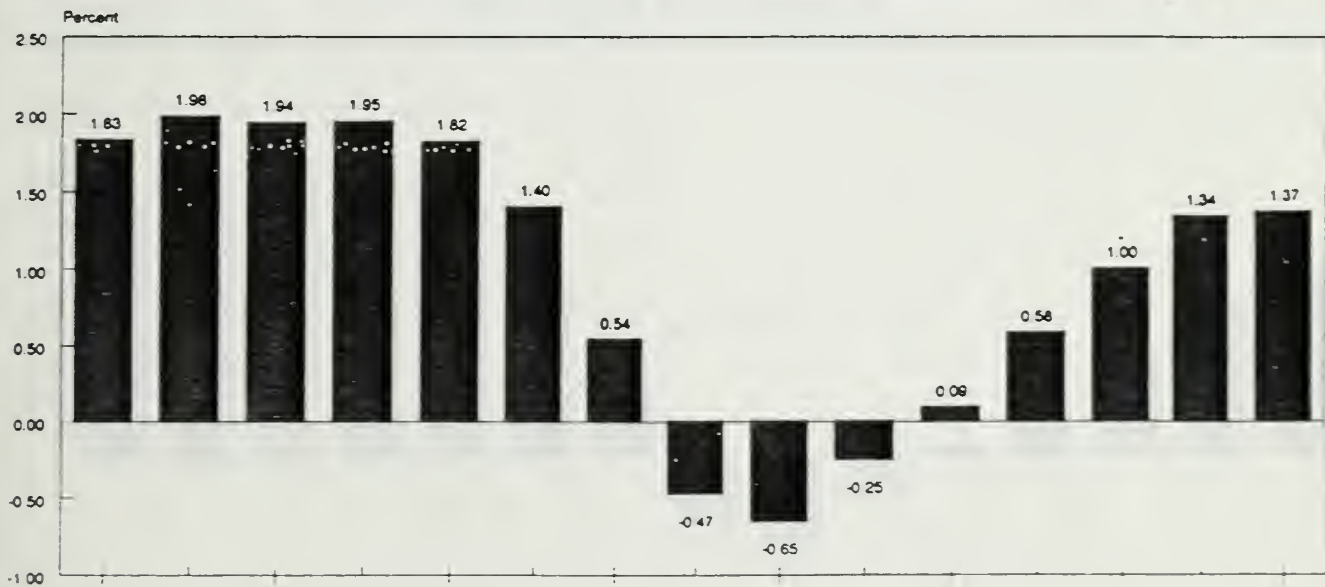
DEPARTMENT OF CHEMISTRY

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UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE Percent of Total Payroll



1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

2. In the second part of the paper we shall consider the problem of the existence of solutions of the system of equations

which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

3. In the third part of the paper we shall consider the problem of the existence of solutions of the system of equations

which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

4. In the fourth part of the paper we shall consider the problem of the existence of solutions of the system of equations

which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

5. In the fifth part of the paper we shall consider the problem of the existence of solutions of the system of equations

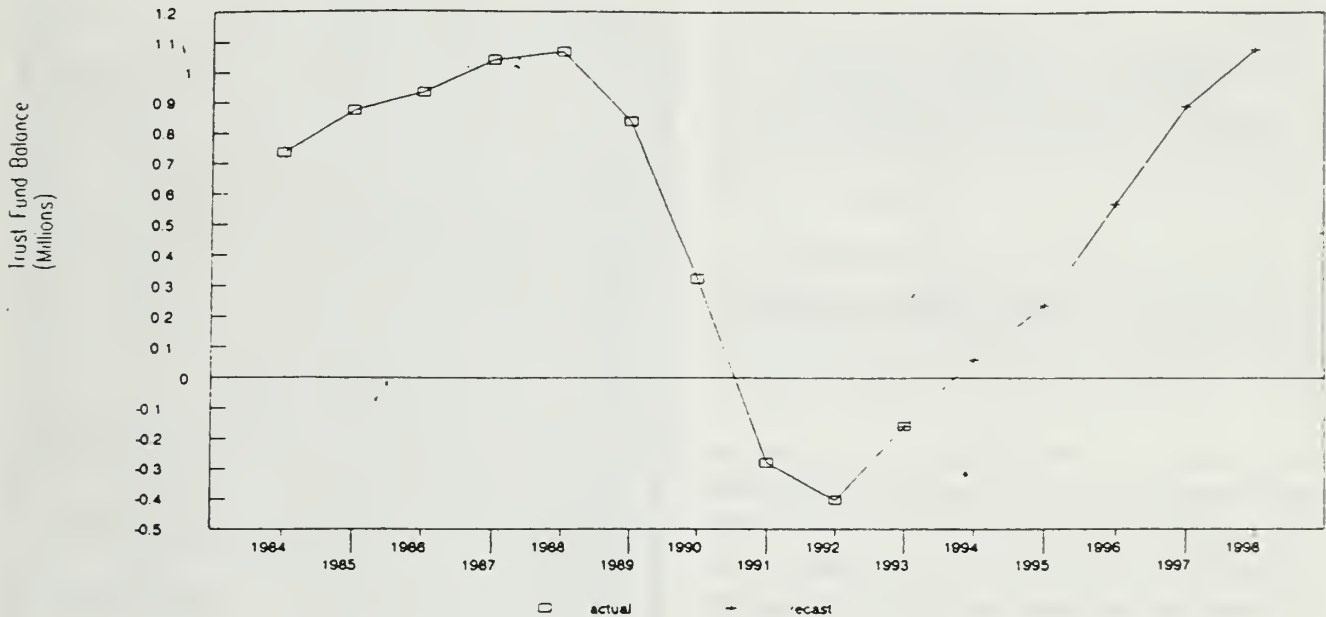
which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

6. In the sixth part of the paper we shall consider the problem of the existence of solutions of the system of equations

which are satisfied by the functions $u_i(x, y, z)$ and $v_i(x, y, z)$ in the domain D of the space E_3 .

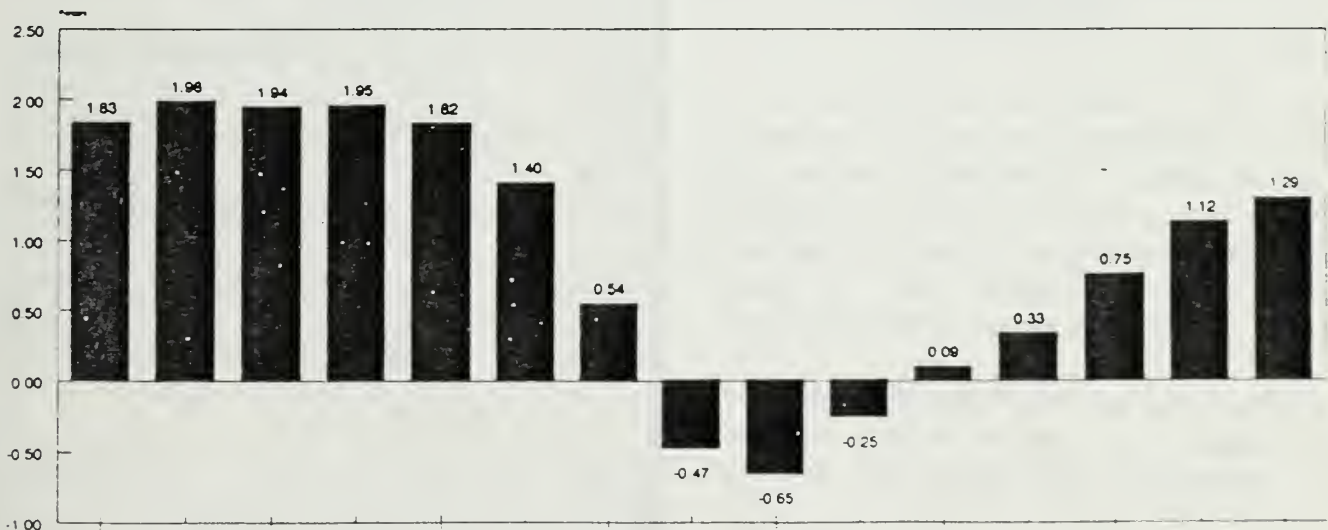
Net Effect Of Recommended Schedule "D" For 1995

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE

Percent of Total Payroll



THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

NO. 100

1950

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QUARTERLY TRUST FUND REPORT

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OCTOBER 1994
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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of August 1994 the Massachusetts Unemployment Insurance Trust Fund balance was \$186.8 million. This balance was composed of a private contributory fund balance of \$148.8 million and a governmental contributory account balance of \$38 million.

ASSUMPTIONS USED IN 1994 TO 1998 FORECASTS

For this forecast, DET has utilized the Wharton Econometric Forecasting Associates (WEFA) summer 1994 outlook. This forecast, modified by the Massachusetts Department of Revenue to reflect actual economic activity through August 1994, runs through 1996. The 1997 and 1998 trends are based on the spring WEFA long-term forecast.

The economic assumptions from the aforementioned forecast are displayed on page 2 and compared to the August 1994 trust fund report assumptions.

	Wage & Salary		Labor	
	Growth (%)		Force (000)	
	8/94	10/94	8/94	10/94
1994	5.5	6.3	3,160.1	3,168.2
1995	5.2	6.5	3,178.5	3,218.0
1996	5.5	5.6	3,180.1	3,249.4
1997	5.6	5.6	3,181.4	3,260.3
1998	5.5	5.5	3,192.1	3,271.3

	Total		Insured	
	Unemployment		Unemployment	
	Rate (%)		Rate (%)	
	8/94	10/94	8/94	10/94
1994	6.3	6.0	3.1	2.9
1995	6.3	5.6	3.2	2.9
1996	6.2	5.6	3.2	3.0
1997	6.0	5.5	3.1	2.9
1998	6.0	5.5	3.1	3.0

Compared to the prior trust fund report, the October outlook is characterized by more rapid wage and salary growth in the early years. Labor force growth is more rapid throughout the entire forecast than was estimated in the August 1994 report. The projected unemployment rate is characterized by a decline that stabilizes at 5.5% for the last two years of the forecast. This leads to an insured unemployment rate which remains between 2.9% and 3.0 % for the life of the forecast.

1994 OUTLOOK

The Massachusetts Benefit Financing Simulation forecasts the private fund to receive \$1,057 million in contributions and pay out \$812 million in benefits during calendar year 1994. This results in an end of year balance of \$90 million in the private

contributory account, reflecting lower than expected benefit payments for the third and fourth quarter.

In the first quarter of 1994, average duration of unemployment was 16.5 weeks, down from the 1993 first quarter level of 19.1 weeks. Initial claims for 1994 are tracking at or below last year's level.

This outlook is based on actual claims and payment data through June of 1994. Preliminary total and contributory wage data is used for the first quarter of 1994. Employment and wage data for 1994 and later years continue to be estimated by the simulation. DET continues to monitor actual income and outflow data, as well as data on the volume of contributions deferred.

On September 30, 1994, DET paid \$4.7 million in interest due on advances from the federal loan interest fund. This was the final payment of interest on the monies borrowed through federal Title XII advances. The model does not indicate any further cash shortfalls in 1994.

1995 OUTLOOK

At the beginning of 1995, according to the model, the private contributory fund will have \$90 million in reserves. Current law requires that rates be set on schedule "F" in 1995, which would generate \$1,277 million in contributions to the private account in calendar year 1995, a 21 percent increase over 1994. Benefit payments from the private fund are now estimated to be \$839 million, \$72 million lower than was estimated in the August report. The model also projects \$28 million more in employer contributions under schedule "F". These lower benefit outlays, combined with the higher contributions for the year, would leave the private account with a balance of \$551 million at the end of 1995.



1996-1998 OUTLOOK

The Benefit Financing Simulation projects steadily growing reserves in the fund, as 1996 income under rate schedule "F" exceeds benefit outlays. As the balance approaches \$1 billion by the end of 1996, schedule "E" is triggered in 1997. The schedule then drops to schedule "D" in 1998. The private contributory fund is estimated to end calendar year 1998 at \$1,434 million under these conditions. This balance reflects the most solvent trust fund since 1988, when trust fund reserves equalled 1.82 percent of total payrolls (see page 6). The effect of this scenario is portrayed in tables 1 and 2.

STATUTORY REQUIREMENTS

Section 54 of Chapter 118 of the Acts of 1992 requires DET to notify the legislature if contributions for any calendar year are expected to exceed 1.75% of total wages. Based on estimates produced by the Benefit Financing Simulation, contributions under schedule "F" are expected to equal 1.73% of payrolls in 1995.

RECOMMENDATION

Section 54 of Chapter 118 of the Acts of 1992 requires the commissioner to annually recommend a schedule providing for a reasonable trust fund balance. Therefore, DET recommends the enactment of House 4803 filed by the Governor on April 15,

1994. The bill would require DET to set employer contribution rates on schedule "D" again for 1995. Enactment would result in \$177 million less in employer contributions in 1995 than would be likely if schedule "F" is mandated. The December 31, 1995 balance would be \$184 million less. The long-range impact of setting rates under schedule "D" in 1995 is displayed in tables 1A and 2A.



Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$90	\$551	\$966	\$1,269
Net Income	1994	\$1,057	\$1,277	\$1,240	\$1,112	\$982
Trust Fund Interest		\$2	\$23	\$62	\$95	\$117
Net Benefits	\$748	\$812	\$839	\$887	\$904	\$934
Balance, Dec 31	(\$157)	\$90	\$551	1996	\$1,269	\$1,434
Surcharge Collections	\$37	\$4	N/A	N/A	N/A	N/A
Interest Due On Federal Advances (Due 9/30)	\$24.9*	\$4.7	N/A	N/A	N/A	N/A
Schedule	"D"	"D"	"F"	"F"	"E"	"D"
*Paid September 30, 1993						

Table 2

Economic Assumptions
Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$63.7	\$23.0	2,724	4.3%	36.1%	1.70%*	5.6%	2.9%
1994	\$67.3	\$23.4	2,726	4.5%	34.8%	1.24%	6.0%	2.9%
1995	\$73.8	\$24.9	2,777	5.2%	33.7%	1.24%	5.6%	2.9%
1996	\$78.5	\$25.5	2,802	4.8%	32.5%	0.92%	5.6%	3.0%
1997	\$82.9	\$26.0	2,812	4.2%	31.4%	0.80%	5.5%	2.9%
1998	\$87.5	\$26.5	2,821	3.7%	30.3%	0.68%	5.5%	3.0%

* DET actual, not model output.

20. *Chrysomelidae* (continued)

Chrysomelidae (continued)

No.		Name	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

Chrysomelidae (continued)

No.		Name	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

20. *Chrysomelidae* (continued)

Net Effect Of Recommended Schedule "D" For 1995

Table 1A

Massachusetts Benefit Financing Simulation Private Contributory Trust Fund Account (All \$ Millions)

	1993	1994	1995	1996	1997	1998
Balance, Jan 1	(\$403)	(\$157)	\$90	\$368	\$776	\$1,190
Net Income	\$994	\$1,057	\$1,100	\$1,251	\$1,236	\$1,003
Trust Fund Interest		\$2	\$17	\$45	\$82	\$111
Net Benefits	\$748	\$812	\$839	\$887	\$904	\$934
Balance, Dec 31	(\$157)	\$90	\$368	\$776	\$1,190	\$1,370
Surcharge Collections	\$37	\$4	N/A	N/A	N/A	N/A
Interest Due On Federal Advances (Due 9/30)	\$24.9*	\$4.7	N/A	N/A	N/A	N/A
Schedule	"D"	"D"	"D"	"F"	"F"	"D"
*Paid September 30, 1993						

Table 2A

Economic Assumptions Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1993	\$63.7	\$23.0	2,724	4.3%	36.1%	1.70%*	6.9%	2.9%
1994	\$67.3	\$23.0	2,726	4.5%	34.8%	1.24%	5.6%	2.9%
1995	\$73.8	\$24.9	2,777	4.4%	33.7%	1.21%	5.6%	2.9%
1996	\$78.5	\$25.5	2,802	5.0%	32.5%	0.99%	5.6%	3.0%
1997	\$82.9	\$26.0	2,812	4.7%	31.4%	0.86%	5.5%	2.9%
1998	\$87.5	\$26.5	2,821	3.7%	30.3%	0.70%	5.5%	3.0%

* DET actual, not model output.

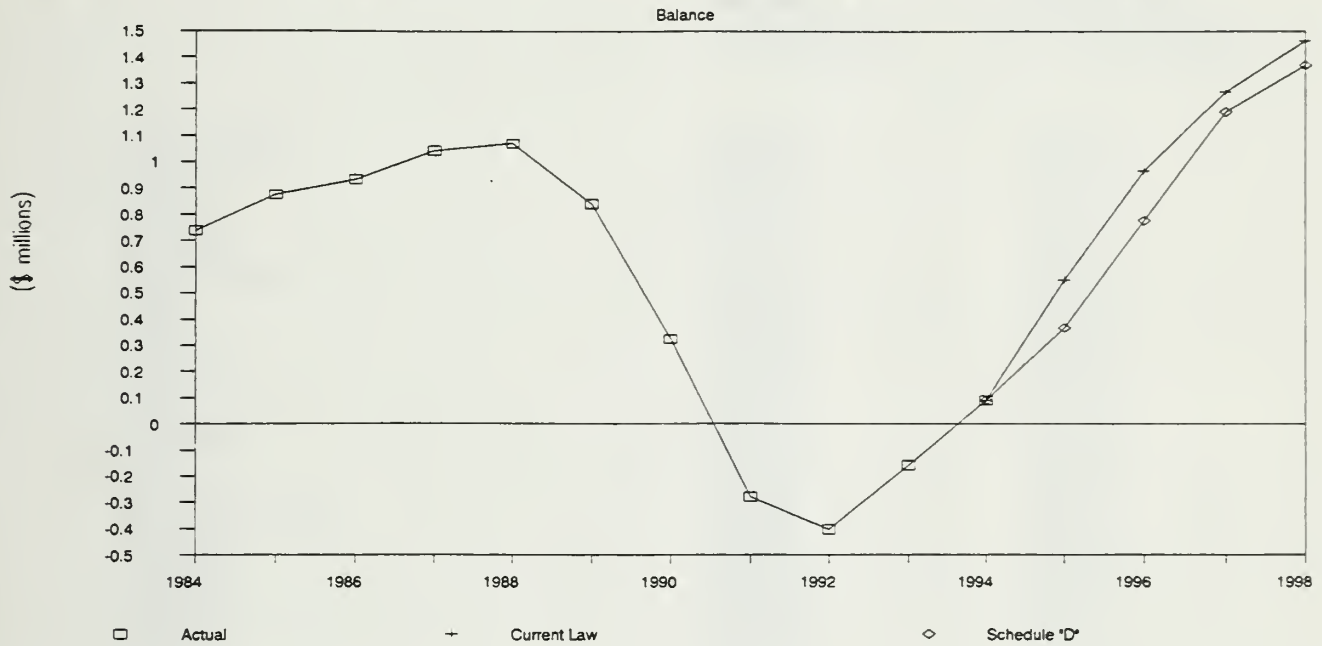
THE HISTORY OF THE UNITED STATES OF AMERICA

The history of the United States of America is a story of growth and change. It begins with the first settlers, who came to the New World in search of a better life. They found a land of opportunity, but also a land of challenge. The early years were marked by conflict and struggle, as the settlers fought to establish their own society. Over time, the United States grew from a small colony into a powerful nation. It has faced many challenges, but it has always emerged stronger and more united. The story of the United States is a story of hope and achievement.

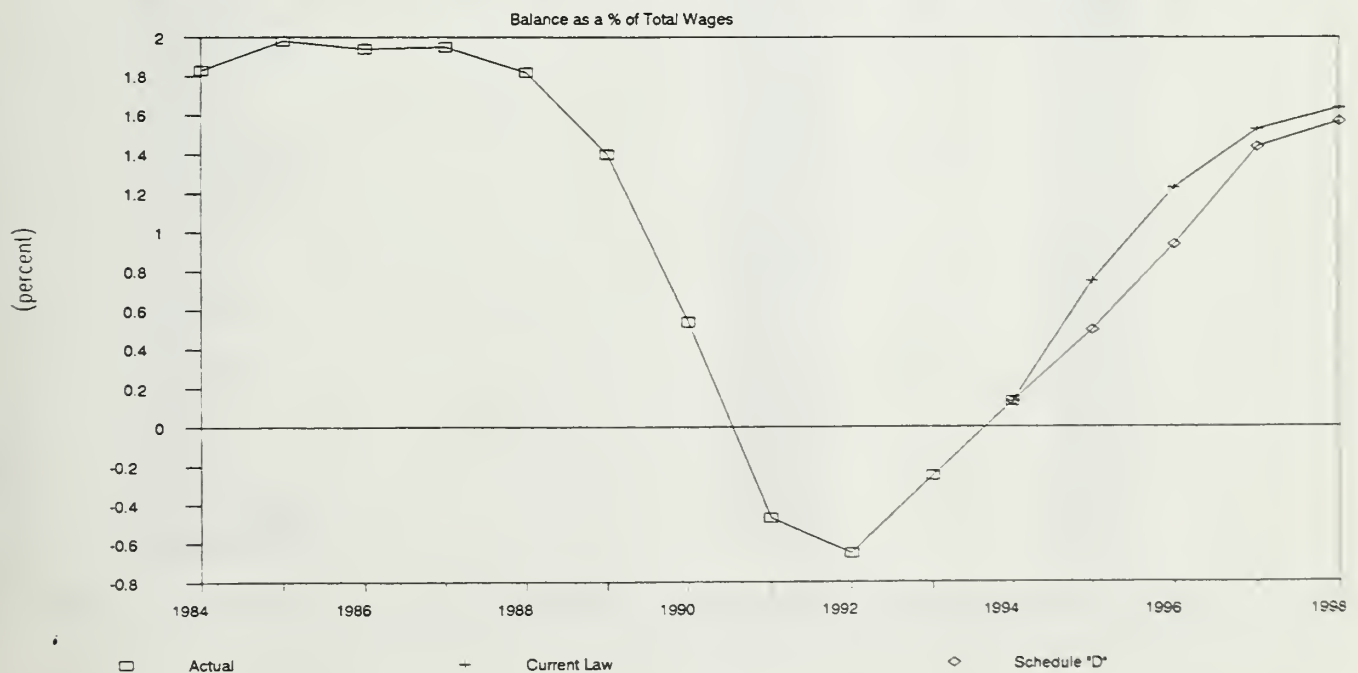
THE CONSTITUTION

The Constitution is the foundation of the United States. It is the document that defines the structure of the government and the rights of the citizens. It is a document that has shaped the course of the nation's history. The Constitution is a living document, and it has evolved over time to meet the needs of the people. It is a document that is proud and cherished by all Americans. The Constitution is the heart of the United States, and it is the source of its strength and unity.

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE



MASSACHUSETTS TRUST FUND BALANCE



THE UNIVERSITY OF CHICAGO

PHILOSOPHY DEPARTMENT

PHILOSOPHY 101

PHILOSOPHY 102

PHILOSOPHY 103

THE SOLVENCY OF STATE TRUST FUNDS

	1993 TRUST FUND BALANCE	
	BALANCE IN THOUSANDS	AS A PERCENT OF TOTAL WAGES
PUERTO RICO	\$730,873	8.35%
VIRGIN ISLANDS	\$51,575	6.66%
OREGON	\$1,096,695	4.63%
VERMONT	\$183,025	4.38%
ALASKA	\$227,911	4.32%
WYOMING	\$127,332	4.08%
WASHINGTON	\$1,743,146	4.05%
IDAHO	\$247,823	3.49%
IOWA	\$655,066	3.20%
DELAWARE	\$225,943	3.05%
KANSAS	\$658,053	3.03%
HAWAII	\$310,155	3.01%
NEW MEXICO	\$271,194	2.90%
WISCONSIN	\$1,241,918	2.87%
UTAH	\$366,524	2.82%
MISSISSIPPI	\$410,259	2.72%
NORTH CAROLINA	\$1,514,674	2.60%
NEVADA	\$238,398	2.55%
LOUISIANA	\$689,382	2.47%
NEW JERSEY	\$1,965,236	2.23%
OKLAHOMA	\$437,800	2.13%
INDIANA	\$1,024,658	2.06%
ALABAMA	\$570,118	1.94%
MONTANA	\$104,415	1.91%
GEORGIA	\$1,094,999	1.79%
SOUTH CAROLINA	\$467,494	1.77%
NEW HAMPSHIRE	\$164,455	1.70%
NORTH DAKOTA	\$56,267	1.59%
TENNESSEE	\$672,261	1.58%
KENTUCKY	\$402,311	1.57%
RHODE ISLAND	\$119,294	1.56%
WEST VIRGINIA	\$154,512	1.49%
NEBRASKA	\$171,938	1.49%
FLORIDA	\$1,505,570	1.45%
ARIZONA	\$368,782	1.26%
SOUTH DAKOTA	\$49,773	1.23%
COLORADO	\$390,435	1.15%
PENNSYLVANIA	\$1,105,425	1.12%
VIRGINIA	\$553,441	1.01%
ARKANSAS	\$134,432	0.87%
OHIO	\$845,054	0.87%
CALIFORNIA	\$2,450,402	0.86%
ILLINOIS	\$851,918	0.72%
MAINE	\$51,403	0.62%
MINNESOTA	\$257,584	0.59%
MARYLAND	\$219,071	0.54%
MICHIGAN	\$364,530	0.42%
TEXAS	\$445,633	0.30%
MISSOURI	\$62,251	0.14%
NEW YORK	\$129,409	0.07%
DIST. OF COLUM.	\$5,937	0.05%
CONNECTICUT	\$1,062	0.00%
MASSACHUSETTS	\$0	0.00%

SOURCE: U.S. DEPARTMENT OF LABOR, EMPLOYMENT AND TRAINING ADMIN. DIVISION OF ACTUARIAL SERVICE



QUARTERLY TRUST FUND REPORT

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MAY 15 1995

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JANUARY 1995

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U.I. DATABANK

Distribution of Employment by Establishment Size Class: March 1994

Establishment Size # of Employees	# of Employees	Percent of Total
0 - 9	351,335	12.63%
10 - 49	643,091	22.12%
50 - 249	809,897	29.12%
250+	977,288	35.13%
TOTAL	2,781,611	100.00%

Source: ES-202 program

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

For the first time since September of 1991, the Massachusetts Unemployment Insurance Trust Fund achieved solvency. At the end of calendar year 1994, the Massachusetts Unemployment Insurance Trust Fund had a positive balance of \$160 million, with the private contributory account ending the year with a balance of \$122 million, and the governmental contributory account at \$37 million.

1994 IN REVIEW

The Massachusetts economy continued to improve through 1994, with the unemployment rate averaging 6.0 percent, the lowest since the beginning of the most recent recession. This decline in the unemployment rate held benefit payments from the private contributory account to \$777 million during calendar year 1994. Private employer contributions of \$1,055 million, \$278 million more than benefit payments, returned the private contributory account to solvency in 1994.

E Department of This report is prepared by the Economic Research
Service, Department of Employment and Training of
Commonwealth of Massachusetts. Any questions can
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ASSUMPTIONS USED IN 1995 TO 1999 FORECASTS

For this forecast, the Massachusetts Benefit Financing Simulation has utilized the long-term forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in September 1994 and modified by the Massachusetts Department of Revenue.

The assumptions from the WEFA forecast are arrayed below and compared to the October 1994 trust fund report assumptions.

	Wage & Salary		Labor	
	Growth (%)		Force (000)	
	10/94	1/95	10/94	1/95
1995	6.5	5.3	3,218.0	3,178.2
1996	5.6	5.1	3,249.4	3,193.3
1997	5.6	5.3	3,260.3	3,201.6
1998	5.5	5.5	3,271.3	3,210.0
1999	N.A.	5.6	N.A.	3,216.9

	Total		Insured	
	Unemployment		Unemployment	
	Rate (%)		Rate (%)	
	10/94	1/95	10/94	1/95
1995	5.6	5.8	2.9	3.0
1996	5.6	5.9	3.0	3.1
1997	5.5	6.0	2.9	3.1
1998	5.5	5.9	3.0	3.1
1999	N.A.	5.8	N.A.	3.0

Compared to the October trust fund report the current outlook is characterized by slower wage and salary growth through 1997 and by slower labor force growth during the forecast period. More significantly, the unemployment rate climbs slightly to a peak of 6.0 percent in 1997 before declining to 5.8 percent in 1999, as opposed to declining over the duration of the forecast as the October

assumptions did. This results in an insured unemployment rate that stabilizes at 3.1 percent for the years 1996, 1997, and 1998, and then declines to 3.0 percent in 1999.

Table 1 (page 3) contains data concerning the annual activity in the private contributory account. Table 2 details the economic assumptions used by the Massachusetts Benefit Financing Simulation.

1995 OUTLOOK

Enactment of Chapter 260 of the Acts of 1994, (which established employer contributions based on schedule "D" for calendar year 1995), will result in an estimated \$1.1 billion in contributions. Benefit payouts, estimated to be \$882 million during calendar year 1995, are \$43 million higher than the October forecast. The private contributory account is forecast to have an estimated \$362 million balance at the end of 1995.

1996 - 1999 FORECAST

The change in the economic assumptions, specifically the increase in the unemployment rates, results in higher benefit payments over the forecast period. The levels of employer contributions during the period are similar to those in the October 1994 trust fund report. Schedule "F" is required in 1996 by Chapter 118 of the Acts of 1992. The employer contribution rate schedule will remain on "F" in 1997, before dropping to "D" in 1998 and to "C" for 1999. The private contributory account balance is estimated to be \$1.4 billion at the end of 1999.



Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1994	1995	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$362	\$771	\$1,171	\$1,361
Net Income	\$1,055	\$1,105	\$1,273	\$1,248	\$1,019	\$894
Trust Fund Interest	\$2	\$17	\$46	\$83	\$112	\$124
Net Benefits	\$777	\$882	\$910	\$931	\$941	\$952
Balance, Dec 31	\$122	\$362	\$771	\$1,171	\$1,361	\$1,427
Schedule	"D"	"D"	"F"	"F"	"D"	"C"

Figures may not add due to rounding

Table 2

Economic Assumptions
Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

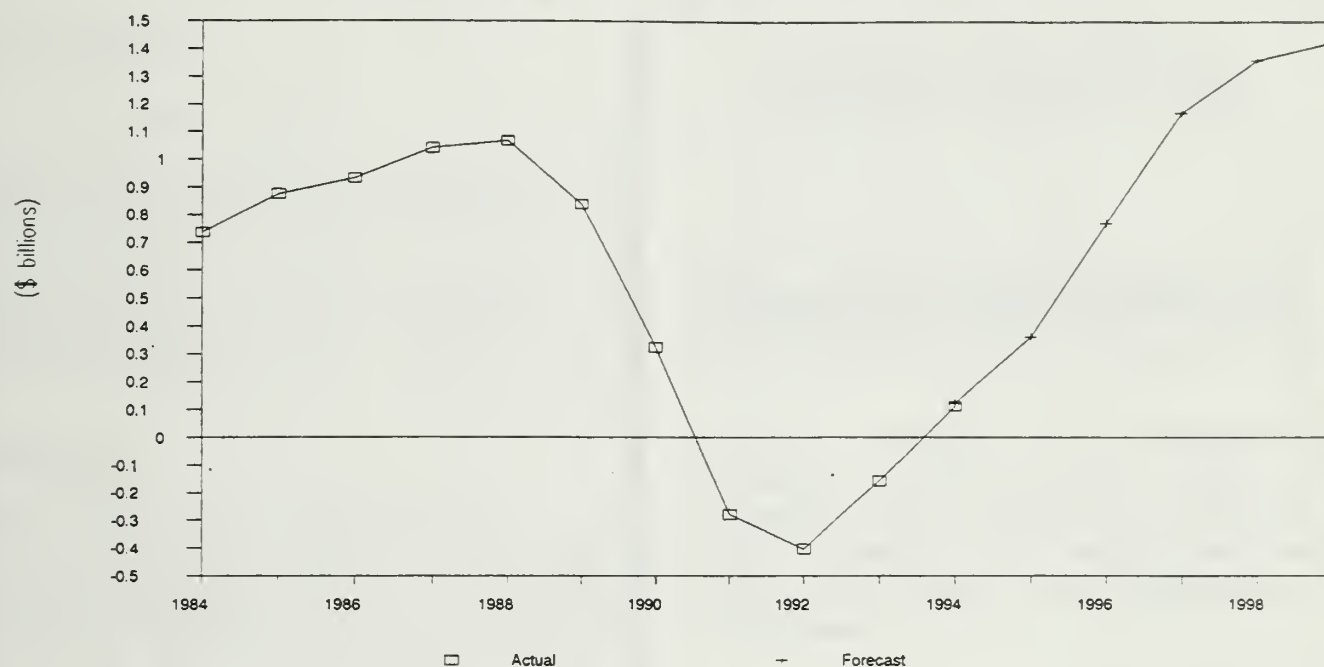
Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$66.3	\$23.6	2,759	4.5	35.6	1.60*	6.0	3.0
1995	\$70.6	\$24.3	2,738	4.9	34.4	1.35	5.8	3.0
1996	\$74.3	\$24.7	2,759	5.2	33.2	1.13	5.9	3.1
1997	\$78.3	\$25.1	2,757	4.9	32.1	0.95	6.0	3.1
1998	\$82.6	\$25.6	2,759	3.9	31.0	0.78	5.9	3.1
1999	\$87.2	\$26.1	2,772	3.4	29.9	0.70	5.8	3.0

* DET estimate, not model output.

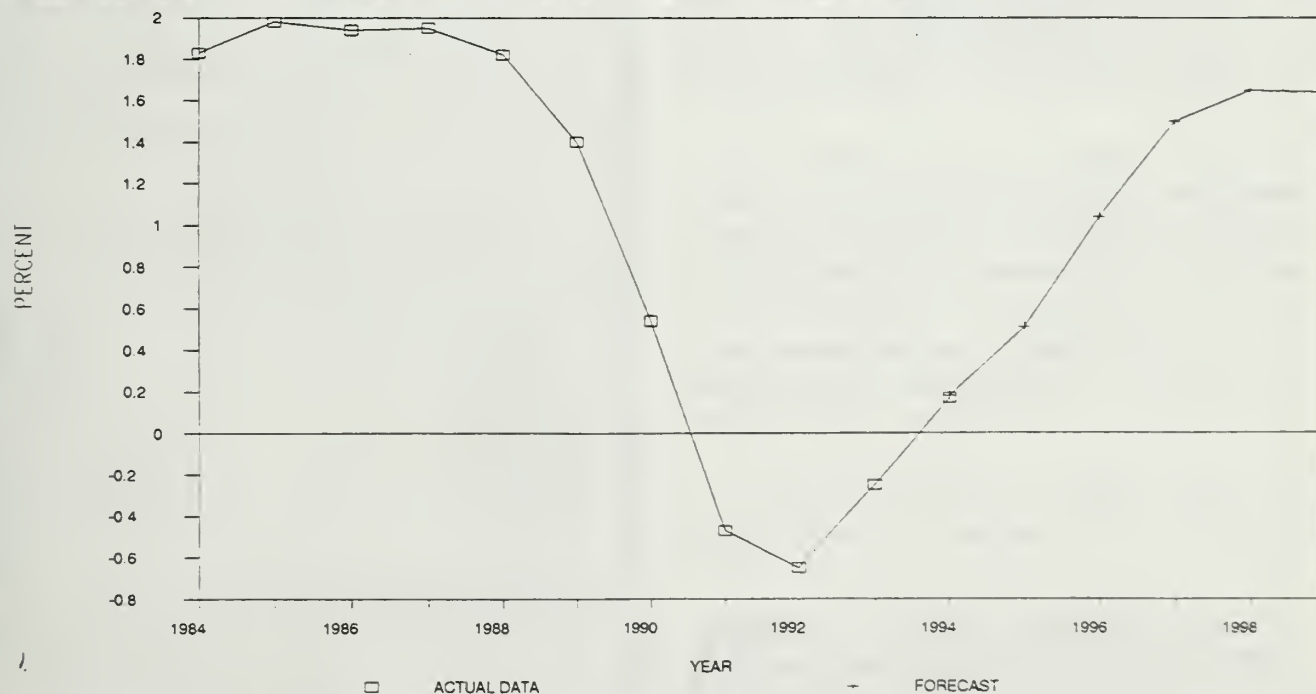


UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only



PRIVATE ACCOUNT BALANCE AS A % OF TOTAL WAGES



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QUARTERLY TRUST FUND REPORT

JUL 21 1995

DET RESEARCH

APRIL 1995

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RANK OF STATES

Average Weekly Benefit Amount for
Total Unemployment CY94

STATE	AWBA
1. Hawaii	\$258.72
2. New Jersey	\$245.61
3. Massachusetts	\$237.00
4. Connecticut	\$222.00
5. Minnesota	\$217.44

Source: 1995 Nevada Significant Unemployment
Insurance Data.

THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of February 1995, the Massachusetts Unemployment Insurance Trust Fund balance was \$124 million, with the private contributory account having a balance of \$85 million, and the governmental contributory account holding a \$39 million balance.

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the short-term economic assumptions produced by the Wharton Econometric Forecasting Associates (WEFA) in December 1994 and modified by the Massachusetts Department of Revenue. These assumptions run through 1997. For the remaining years the September 1994 long-term WEFA forecast was used.

The assumptions from the WEFA forecast are arrayed below and compared to the economic



assumptions used in the January 1995 trust fund report.

Wage & Salary Growth (%)			Labor Force (000)	
	1/95	4/95	1/95	4/95
1995	5.3	4.7	3,178.2	3,232.3
1996	5.1	5.1	3,193.3	3,271.3
1997	5.3	5.2	3,201.6	3,310.8
1998	5.5	5.3	3,210.0	3,331.7
1999	5.6	5.6	3,216.9	3,338.9

Total Unemployment Rate (%)			Insured Unemployment Rate (%)	
	1/95	4/95	1/95	4/95
1995	5.8	5.7	3.0	3.0
1996	5.9	5.7	3.1	3.0
1997	6.0	5.7	3.1	3.0
1998	5.9	5.7	3.1	3.0
1999	5.8	5.6	3.0	3.0

Compared to the January trust fund report, the current outlook is characterized by slower wage and salary growth through 1998. The unemployment rate remains constant at 5.7 percent through 1998, before declining to 5.6 percent in 1999. This represents a change from the January forecast where the unemployment rate increased to a peak of 6.0 percent in 1997 before dropping to 5.8 percent in 1999. The resulting insured unemployment rate remains stable at 3.0 percent for the duration of the forecast. The labor force is forecast to grow moderately through the entire duration of this outlook.

Table 1 contains data concerning the annual activity in the Private Contributory Account. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1995 OUTLOOK

The enactment of Chapter 260 of the Acts of 1994, which established employer contributions based on schedule "D" for 1995, will result in an estimated \$1.052 billion in contributions. The \$53 million reduction in estimated contributions from last quarter's report is due to a decline in the average contribution per employee from \$492 in 1994 to \$480 in 1995. The average contribution rate dropped from 4.5% to 4.3% reflecting the reduction in benefit payments during 1994.

Benefit payments, estimated to be \$860 million during calendar year 1995, are \$22 million lower than forecast in January. This lower estimate for benefit payments is, however, in line with DET's payments for the first quarter of 1995. It should be kept in mind that the model cannot predict the cost impact of the changes in the base period required by Chapter 260 of the Acts of 1994. New claims effective April 2, 1995 will be based on more current wages and may result in different average weekly benefit amounts than currently anticipated by the model.

At the end of calendar year 1995, the private contributory account is forecast to have a \$331 million balance.



1996 - 1999 FORECAST

The stable unemployment rates, combined with the growth in wages and labor force, result in gradually higher annual benefit outlays over the forecast period, reaching \$1 billion in 1999. This would be the third time in the fund's history that outlays exceed \$1 billion (outlays for 1990 were \$1 billion and 1991 \$1.2 billion). On the income side, higher contribution rates set under Schedule "F" are required in 1996 by Chapter 118 of the Acts of 1992. Since reserves are estimated to be less than 1.1% of payrolls in Massachusetts, the simulation projects Schedule "F" again in 1997, before dropping to "D" in 1998 and 1999. For each of the years of the forecast, it is estimated that employer contributions will exceed \$1 billion. If contribution rates are set on these schedules over the next four years, the private contributory account balance is estimated to be \$1.3 billion at the end of 1999. This would produce a reserve equal to 1.49% of private contributory payrolls, similar to the status of the fund in 1989, but below the levels in the 1984 through 1988 period, when reserves exceeded 1.8%.



Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1994	1995	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$331	\$703	\$1,076	\$1,218
Net Income	\$1,055	\$1,052	\$1,238	\$1,245	\$1,033	\$1,018
Trust Fund Interest	\$1	\$17	\$43	\$77	\$103	\$114
Net Benefits	\$777	\$860	\$909	\$949	\$994	\$1,017
Balance, Dec 31	\$122	\$331	\$703	\$1,076	\$1,218	\$1,333
Schedule	"D"	"D"	"F"	"F"	"D"	"D"

Figures may not add due to rounding

Table 2

Economic Assumptions
Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$66.7	\$23.7	2,762	4.5	35.5	1.53*	6.0*	3.0
1995	\$71.4	\$24.6	2,811	4.3	34.5	1.31	5.7	3.0
1996	\$75.7	\$25.1	2,843	5.0	33.2	1.12	5.7	3.0
1997	\$80.3	\$25.7	2,877	4.8	32.0	0.97	5.7	3.0
1998	\$84.8	\$26.2	2,894	3.9	30.9	0.84	5.7	3.0
1999	\$89.6	\$26.6	2,902	3.8	29.7	0.79	5.6	3.0

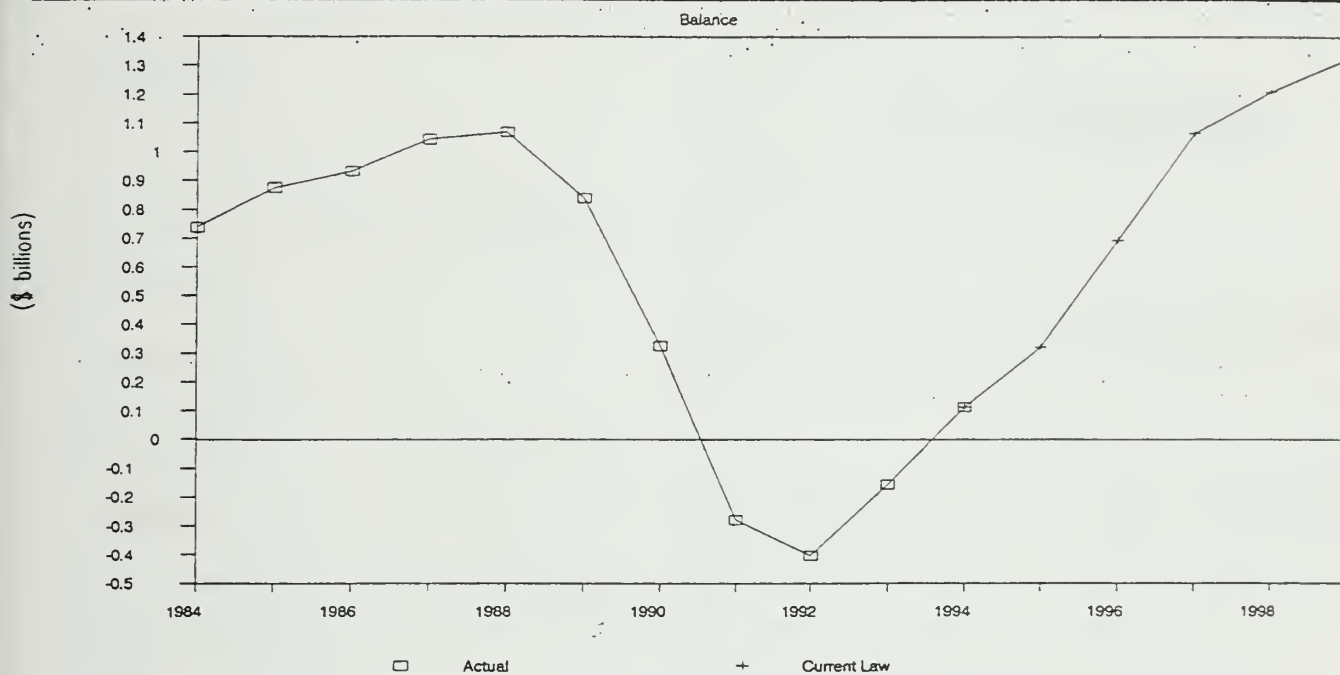
* Actual Data

Figures may not add due to rounding

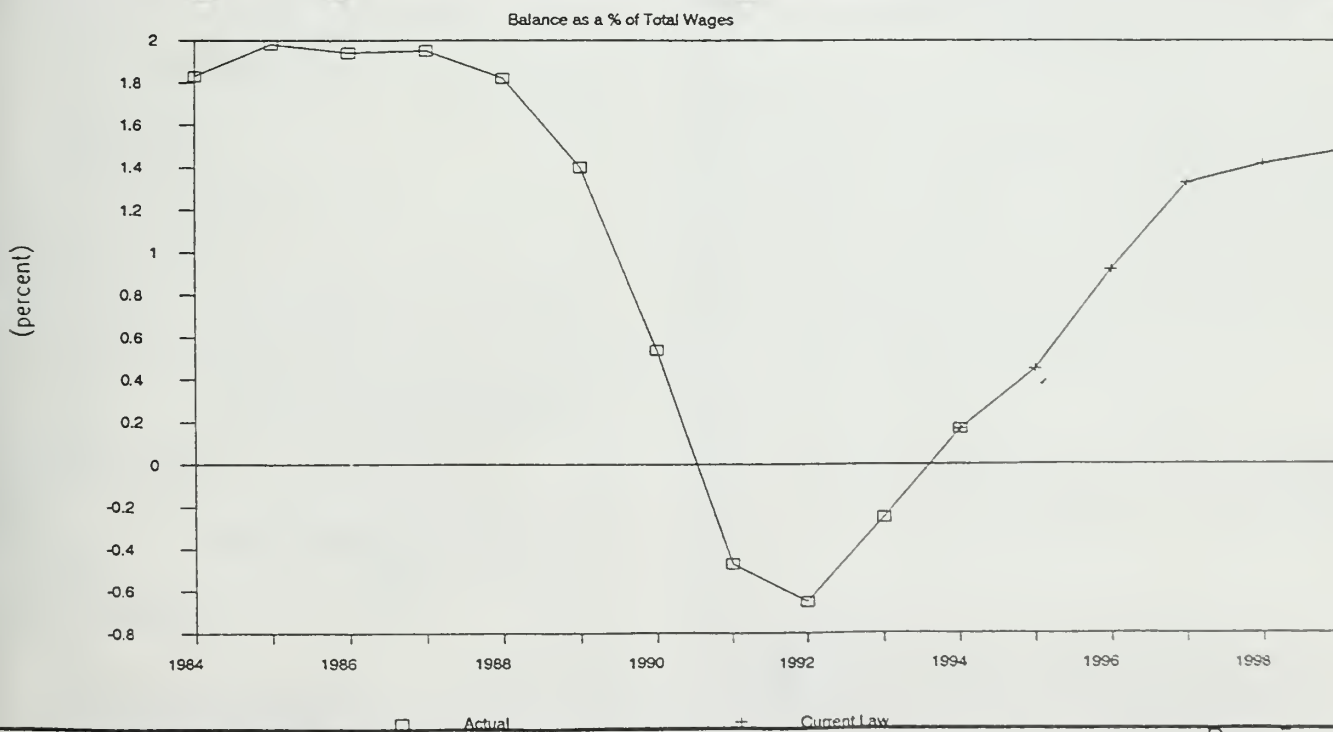


UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only



PRIVATE ACCOUNT BALANCE AS A % OF TOTAL WAGES





**QUARTERLY
TRUST FUND REPORT**

NOV 08 1995

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DET RESEARCH

AUGUST 1995

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Average Duration CY 95 Q1:

U.S.	15.5 weeks
Massachusetts	17.1 weeks

Exhaustion Rate CY 95 Q1:

U.S.	35.3%
Massachusetts	39.2%

Source: U.S. D.O.L. U.I. Data Summary
1st Quarter CY95**THE UNEMPLOYMENT
INSURANCE TRUST FUND****CURRENT CONDITION OF THE FUND**

At the end of June 1995, the Massachusetts Unemployment Insurance Trust Fund balance was \$373 million, with the private contributory account having a balance of \$332 million and the governmental contributory account holding a \$41 million balance.

**ASSUMPTIONS USED IN THIS
FORECAST**

For this benefit financing simulation, DET has utilized the long-term forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in March 1995 and modified in July 1995 by the Massachusetts Department of Revenue. This forecast runs through the duration of the reporting period, calendar year 1999.

The assumptions from the WEFA forecast are arrayed below and compared to the assumptions used to produce the April 1995 trust fund report.

E Department of Employment and Training
This report is prepared by the Economic Research Service, Department of Employment and Training of Commonwealth of Massachusetts. Any questions can be directed to DET at (617) 626-6572

	Wage & Salary		Labor	
	Growth (%)		Force (000)	
	4/95	8/95	4/95	8/95
1995	4.7	4.8	3,232.3	3,201.2
1996	5.1	5.0	3,271.3	3,237.0
1997	5.2	4.9	3,310.8	3,269.0
1998	5.3	5.2	3,331.7	3,298.2
1999	5.6	5.8	3,338.9	3,314.5

	Total		Insured	
	Unemployment		Unemployment	
	Rate (%)		Rate (%)	
	4/95	8/95	4/95	8/95
1995	5.7	5.6	3.0	2.9
1996	5.7	6.0	3.0	3.2
1997	5.7	6.2	3.0	3.2
1998	5.7	6.2	3.0	3.2
1999	5.6	5.9	3.0	3.0

Compared to the April forecast, this economic scenario predicts slower economic growth from 1996 through 1999 as indicated by higher rates of unemployment, slower wage and salary growth and lower labor force levels.

Table 1 contains data concerning the annual activity in the Private Contributory Account. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1995 OUTLOOK

It is now estimated that 1995 contributions will amount to \$1.048 billion, a decrease of \$4 million from the April forecast. Contributions are based on the employer contribution rates set on schedule "D" (as a result of Chapter 260 of the Acts of 1994). The result is an average contribution rate of 4.3%, below the 1994 average rate of 4.5%.

Benefit payments, now estimated to be \$811 million during calendar year 1995, are \$49 million lower than was forecast in April. This estimate reflects actual benefit payment data for the first and second quarter of 1995, which ran 11% below the forecast. However, the model cannot predict the 1995 cost impact of the changes in the base period required by Chapter 260 of the Acts of 1994. Effective April 2, 1995, new benefit claims are based on more current wages. The model is not structured to anticipate this change.

At the end of calendar year 1995, the private contributory account is forecast to have an estimated \$375 million balance.

Comment: The estimates developed by the model for continued weeks claimed used in this forecast are higher than DET's current levels. Based on actual claims and benefit payments for the first seven months of the year, benefit outlays during 1995 may be \$70 to \$80 million less than forecast by the model. If this lower level of benefit payments continues, decreased benefit payments would generate a private contributory account balance of approximately \$450 million by the end of the year.

1996 - 1999 FORECAST

The impact of the expected increase in unemployment, combined with wage and salary growth, results in estimated benefit payments of \$955 million for 1996. Over the remainder of the forecast period benefit payments continue to increase, reaching the \$1 billion level for 1998 and 1999. Contributions, based on schedule "F" as required in 1996 by Chapter 118 of the Acts of 1992, would increase to \$1.214 billion in 1996. The simulation projects the employer contribution rate schedule will remain on "F" in 1997, before dropping to "E" in 1998 and "D" in 1999 as the balance of the fund continues to build. For each of the years of the forecast it is estimated that employer contributions will exceed \$1 billion. The private contributory account balance is estimated to be \$1.254 billion at the end of 1999, if the rate schedules set by statute in 1992 are utilized.

RECOMMENDATION

DET recommends the law be amended this fall to require contribution rate schedule "D" for 1996. The model predicts contributions of \$1.038 billion for 1996 using schedule "D" and a year-end trust fund account balance of \$493 million (see tables 1A and 2A). Remaining on schedule "D" in 1996 avoids a \$176 million increase in employer contributions, while approaching a \$500 million trust fund balance by the end of the year. The average contribution rate would fall to 4.2%, the lowest average rate since 1992.

Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1994	1995	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$375	\$676	\$967	\$1,148
Net Income	\$1,055	\$1,048	\$1,214	\$1,215	\$1,113	\$1,015
Trust Fund Interest	\$1	\$16	\$41	\$68	\$91	\$105
Net Benefits	\$777	\$811	\$955	\$992	\$1,023	\$1,013
Balance, Dec 31	\$122	\$375	\$676	\$967	\$1,148	\$1,254
Schedule	"D"	"D"	"F"	"F"	"E"	"D"

Figures may not add due to rounding

Table 2

Economic Assumptions
Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$67.0	\$23.8	2,788	4.5	35.5	1.53*	6.0*	3.0
1995	\$70.8	\$24.2	2,796	4.3	34.2	1.26	5.6	2.9
1996	\$74.2	\$24.7	2,807	5.0	33.3	1.18	6.0	3.2
1997	\$78.4	\$25.2	2,835	4.8	32.1	1.05	6.2	3.2
1998	\$83.0	\$25.7	2,861	4.3	31.0	0.96	6.2	3.2
1999	\$88.2	\$26.3	2,880	3.8	29.8	0.85	5.9	3.0

* Actual Data

Figures may not add due to rounding

Net Effect of Recommended Schedule "D" For 1996

Table 1A

Massachusetts Benefit Financing Simulation Private Contributory Trust Fund Account (All \$ Millions)

	1994	1996	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$375	\$493	\$780	\$1,068
Net Income	\$1,055	\$1,048	\$1,038	\$1,227	\$1,233	\$1,128
Trust Fund Interest	\$1	\$16	\$35	\$51	\$78	\$101
Net Benefits	\$777	\$811	\$955	\$992	\$1,023	\$1,013
Balance, Dec 31	\$122	\$375	\$493	\$780	\$1,068	\$1,284
Schedule	"D"	"D"	"D"	"F"	"F"	"E"

Figures may not add due to rounding

Table 2A

Economic Assumptions Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:

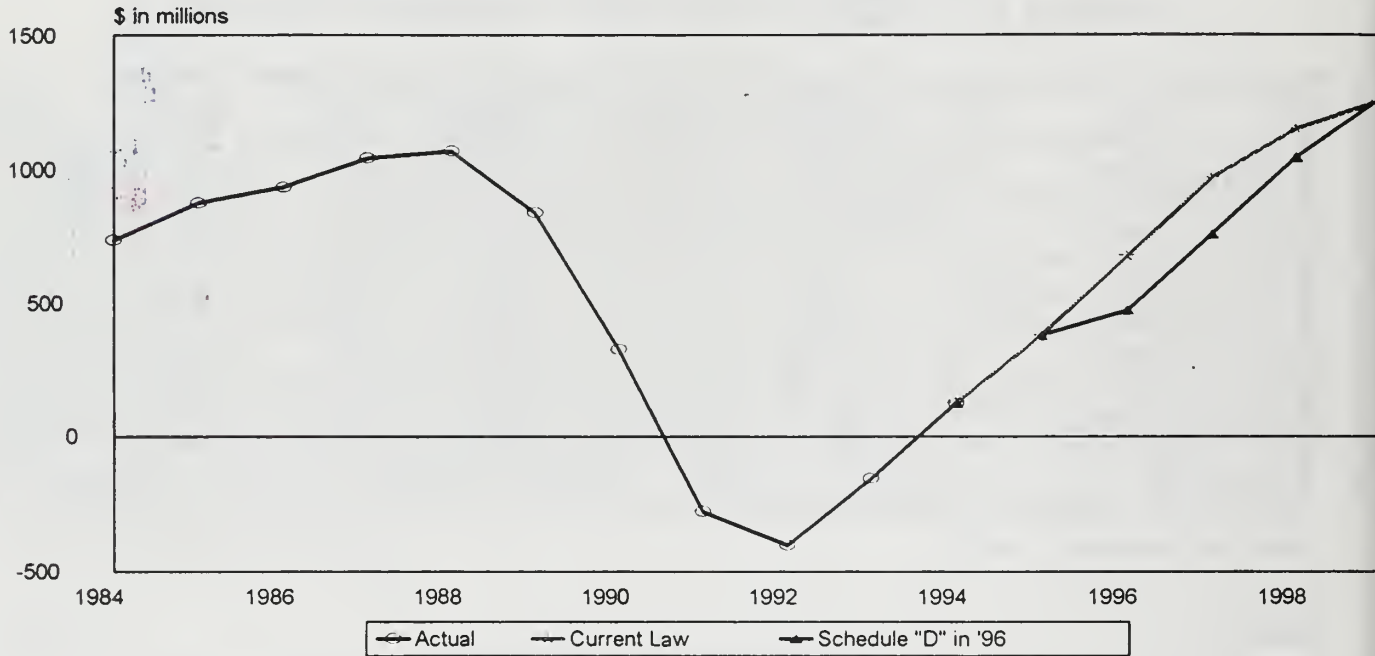
Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$67.0	\$23.8	2,796	4.5	35.5	1.53*	6.0*	3.0
1995	\$70.8	\$74.2	2,796	4.3	34.2	1.26	5.6	2.9
1996	\$74.2	\$24.7	2,807	4.2	33.3	1.19	6.0	3.2
1997	\$78.4	\$25.2	2,835	5.0	32.1	1.11	6.2	3.2
1998	\$83.0	\$25.7	2,861	4.8	31.0	1.02	6.2	3.2
1999	\$88.2	\$26.3	2,880	4.3	29.8	0.88	5.9	3.0

* Actual Data

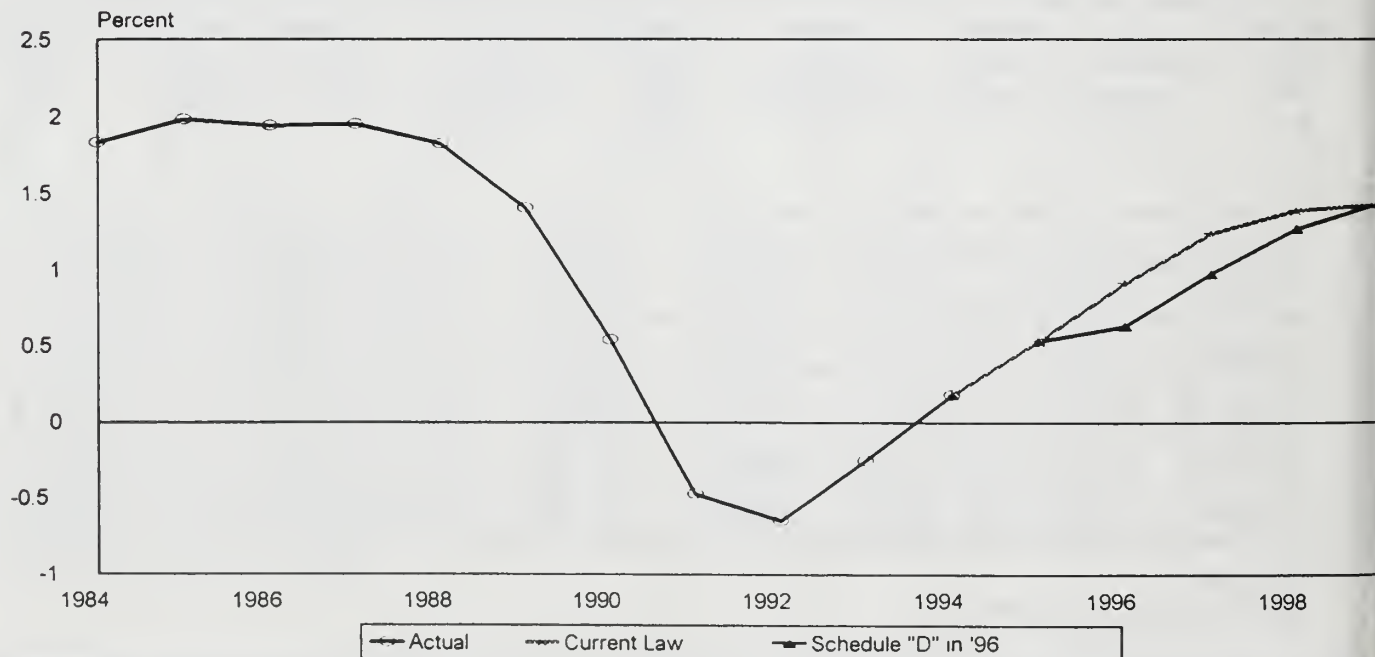
Figures may not add due to rounding

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only



Private Account Balance as % of Total Wages



QUARTERLY TRUST FUND REPORT

DET RESEARCH

OCTOBER 1995

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of August 1995, the Massachusetts Unemployment Insurance Trust Fund balance was \$524 million, with the private contributory account having a balance of \$480 million, and the governmental contributory account holding a \$44 million balance.

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the short-term forecast produced by the Wharton Econometric Forecasting Associates (WEFA) in June 1995, which runs through 1997, combined with the March 1995 long-term forecast for 1998 and 1999. Both forecasts have been modified by the Massachusetts Department of Revenue.

The economic assumptions from the WEFA forecast are arrayed on the next page and compared to the August 1995 trust fund forecasting assumptions.

	Wage & Salary		Labor	
	Growth (%)		Force (000)	
	8/95	10/95	8/95	10/95
1995	4.8	5.7	3,201.2	3,179.0
1996	5.0	4.4	3,237.0	3,235.9
1997	4.9	4.4	3,269.0	3,273.9
1998	5.2	5.0	3,298.2	3,304.8
1999	5.8	5.8	3,314.5	3,321.1

	Total		Insured	
	Unemployment		Unemployment	
	Rate (%)		Rate (%)	
	8/95	10/95	8/95	10/95
1995	5.6	5.5	2.9	2.8
1996	6.0	5.5	3.2	3.0
1997	6.2	5.7	3.2	3.0
1998	6.2	5.8	3.2	3.1
1999	5.9	5.5	3.0	2.9

For the remainder of calendar year 1995, the current economic scenario calls for higher wage and salary growth, a slightly smaller average labor force and a lower unemployment rate than was forecast in August. Comparing the remaining forecast years to the August forecast, the current economic scenario predicts annual average labor force growth roughly equal to the level that was forecast in August, slower wage and salary growth (except for 1999), and lower overall rates of total unemployment. However, the total unemployment rate still rises to 5.8% in 1998 before declining to 5.5% in 1999.

Table 1 contains data concerning the annual activity in the private contributory account. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1995 OUTLOOK

It is now estimated that 1995 contributions will amount to \$1.052 billion, an increase of only \$4 million over the August simulation. Contributions are based on the employer contribution rates set on schedule "D" (as a result of Chapter 260 of the Acts of 1994), and result in an average contribution rate of 4.3%.

Benefit payments, now estimated to be \$793 million during calendar year 1995, are \$18 million lower than was forecast in the August report. The model estimate includes actual benefit payment data for the first and second quarters of 1995. Continued weeks claimed and benefit payments continue to be below the model estimates. Based on actual data through the week ending September 30, 1995, DET estimates that 1995 benefit payments will be \$30 to \$40 million less than the model estimate.

At the end of calendar year 1995, the private contributory account is forecast to have an estimated \$398 million balance.

1996 OUTLOOK

Beginning with a \$398 million balance, the private contributory account is expected to continue to grow through calendar 1996. Current law requires rate schedule "F" in 1996, which is estimated to create \$1.217 billion in revenue during 1996. With benefit outlays estimated to be \$889 in 1996, this revenue would result in a private account balance of \$771 million at the end of calendar 1996.

1997 - 1999 OUTLOOK

Lower unemployment rates combined with growth in wages and the labor force, results in an improving trust fund balance over the course of the forecast period. The lower unemployment rates in this forecast result in lower benefit payout levels than were previously forecast, running roughly \$38 - \$51 million lower per year than the simulation forecast in the August report. The simulation projects the employer contribution rate schedule will remain on "F" in 1997, before dropping to "D" in 1998 and 1999. For each of the years of the forecast it is estimated that employer contributions will exceed \$1 billion. The private contributory account balance is estimated to be approximately \$1.4 billion at the end of 1999 if rates move to schedule "F" in 1996 and 1997.

STATUTORY REQUIREMENTS

Section 54 of Chapter 118 of the Acts of 1992 requires DET to notify the legislature if contributions for any calendar year are expected to exceed 1.75% of total wages. Based on estimates produced by the Simulation, contributions under schedule "F" are expected to equal 1.63% in 1996 and 1.40% if contribution rate schedule "D" is utilized.

RECOMMENDATION

In the August report, DET recommended the law be amended this Fall to require contribution rate schedule "D" for 1996. In light of this latest forecast, DET again makes this recommendation, unless statutory reductions in benefit amounts, duration or eligibility are made. Based on the revised economic assumptions, applying rate schedule "D" in 1996 would result in total employer contributions of \$1.041 million. This level of contributions, combined with the \$889 million in expected benefit payments, would leave an estimated year end balance of \$589 million. On an average cost per employee basis, remaining on schedule "D" in 1996 would lower the projected annual average cost per employee from \$556 to \$476. The long-term impact of moving to schedule "D" for 1996 can be seen in Tables 1A and 2A. If annual savings in the range of \$80 - \$90 million are enacted to be effective by January 1, 1996, the reduction in benefit outflows would equal the revenue loss of a reduction in rates to those on Schedule "C". If Schedule "C" were used the average cost per employee would be \$435, 1.28% of total payroll.

Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1994	1995	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$398	\$771	\$1,125	\$1,252
Net Income	\$1,055	\$1,052	\$1,217	\$1,215	\$1,009	\$1,000
Trust Fund Interest	\$1	\$17	\$46	\$79	\$103	\$115
Net Benefits	\$777	\$793	\$889	\$941	\$985	\$968
Balance, Dec 31	\$122	\$398	\$771	\$1,125	\$1,252	\$1,399
Schedule	"D"	"D"	"F"	"F"	"D"	"D"

Figures may not add due to rounding

Table 2

Economic Assumptions
Economic Assumptions Based on WEFA Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$67.0	\$23.8	2,788	4.5	35.5	1.53	6.0	3.0
1996	\$70.4	\$24.3	2,789	4.3	34.5	1.25	5.5	2.8
1996	\$74.5	\$24.9	2,813	5.0	33.4	1.10	5.5	3.0
1997	\$78.5	\$25.3	2,844	4.8	32.2	0.94	5.7	3.0
1998	\$83.0	\$25.9	2,871	3.8	31.2	0.84	5.8	3.1
1999	\$88.1	\$26.5	2,889	3.8	30.1	0.75	5.5	2.9

* 1994 Actual Data

Figures may not add due to rounding

Net Effect of Recommended Schedule "D" For 1996

Table 1A

Massachusetts Benefit Financing Simulation Private Contributory Trust Fund Account (All \$ Millions)

	1994	1995	1996	1997	1998	1999
Balance, Jan 1	(\$157)	\$122	\$398	\$589	\$936	\$1,171
Net Income	\$1,055	\$1,052	\$1,041	\$1,226	\$1,130	\$1,022
Trust Fund Interest	\$1	\$17	\$40	\$62	\$90	\$109
Net Benefits	\$777	\$793	\$889	\$941	\$985	\$968
Balance, Dec 31	\$122	\$398	\$589	\$936	\$1,171	\$1,334
Schedule	"D"	"D"	"D"	"F"	"E"	"D"

Figures may not add due to rounding

Table 2A

Economic Assumptions Economic Assumptions Based on WEFA Forecasts and Massachusetts Benefit Financing Simulation Output:

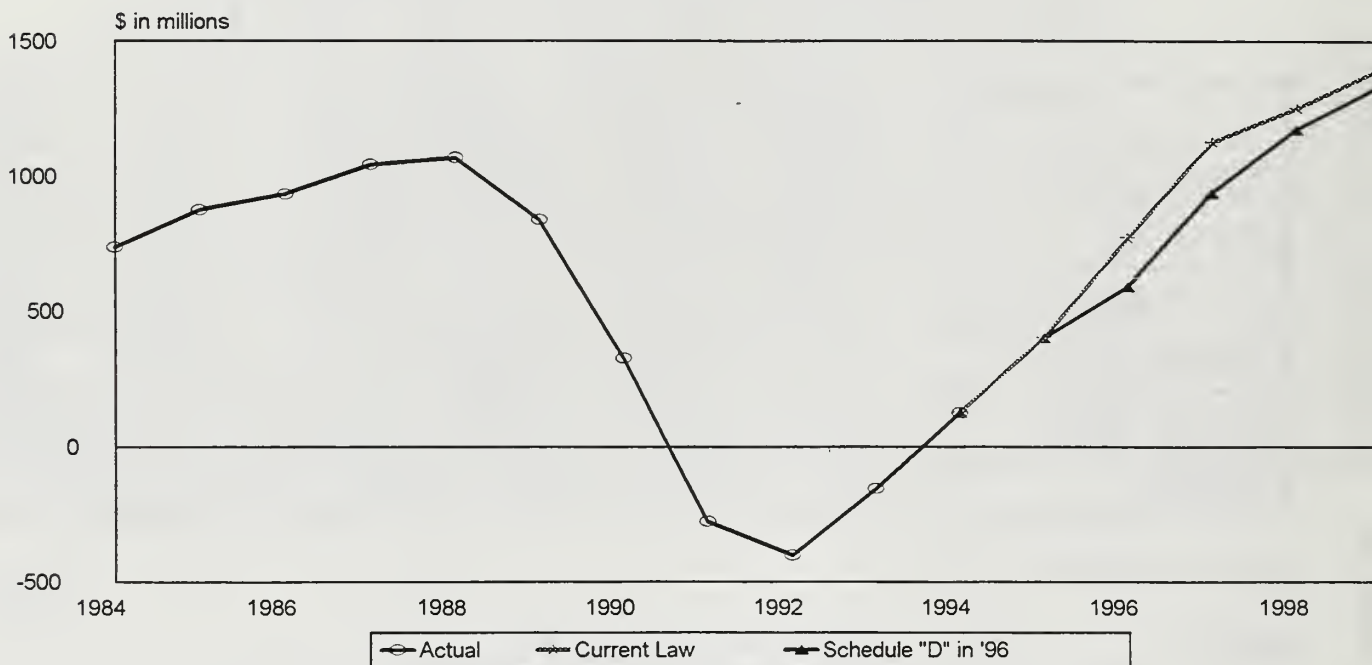
Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1994	\$67.0	\$23.8	2,788	4.5	35.5	1.53	6.0	3.0
1995	\$70.4	\$24.9	2,789	4.3	34.2	1.25	5.5	2.8
1996	\$74.5	\$24.9	2,813	4.2	33.4	1.11	5.5	3.0
1997	\$78.5	\$25.3	2,844	4.9	32.2	1.00	5.7	3.0
1998	\$83.0	\$25.9	2,871	4.3	31.2	0.90	5.8	3.1
1999	\$88.1	\$26.5	2,889	3.8	30.1	0.78	5.5	2.9

* 1994 Actual Data

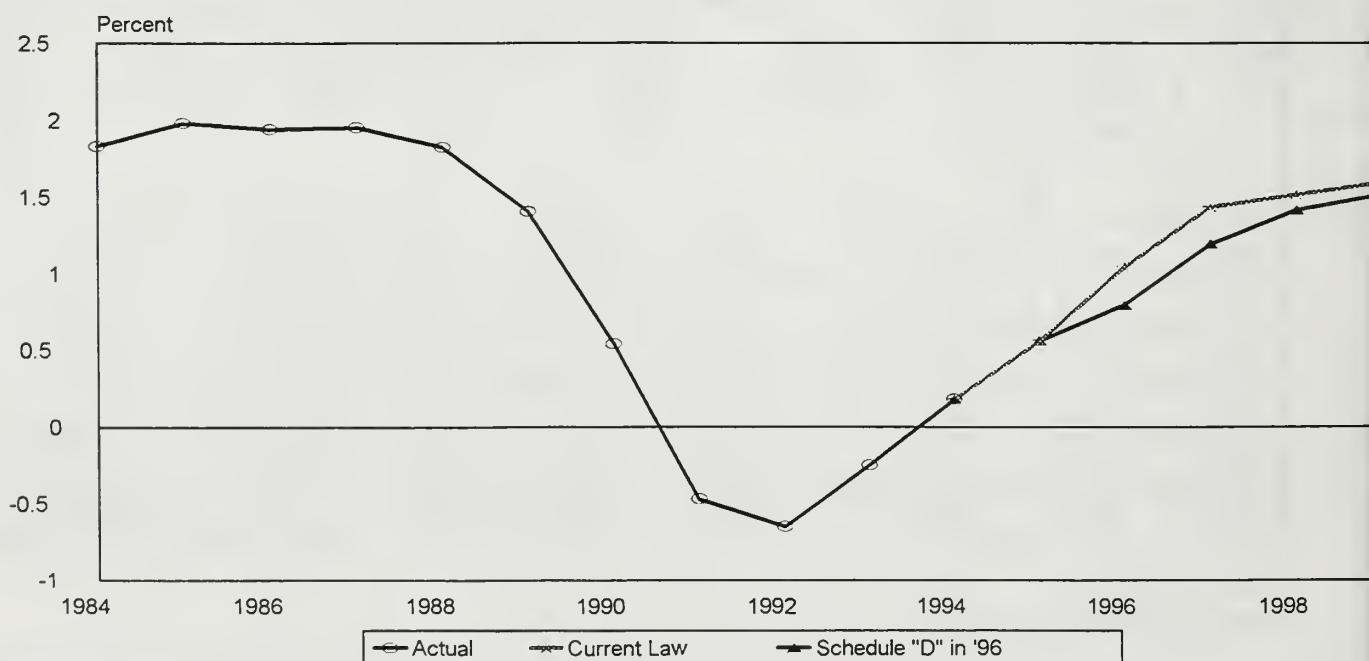
Figures may not add due to rounding

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only



Private Account Balance as % of Total Wages



THE SOLVENCY OF STATE TRUST FUNDS

DECEMBER 31, 1994 TRUST FUND BALANCE

STATE	Balance	As A Percent Of Total Wages
PUERTO RICO	\$663,983,714	7.42%
VIRGIN ISLANDS	\$40,111,829	6.55%
VERMONT	\$192,071,532	4.43%
WYOMING	\$134,421,269	4.08%
OREGON	\$977,494,082	3.79%
ALASKA	\$206,918,041	3.74%
WASHINGTON	\$1,538,159,149	3.39%
IOWA	\$696,430,000	3.18%
KANSAS	\$723,138,000	3.15%
IDAHO	\$242,268,627	3.10%
DELAWARE	\$239,853,851	3.09%
NEW MEXICO	\$311,888,180	3.08%
WISCONSIN	\$1,376,203,081	2.98%
MISSISSIPPI	\$482,691,990	2.93%
LOUISIANA	\$854,060,650	2.87%
UTAH	\$404,369,564	2.81%
NORTH CAROLINA	\$1,528,854,406	2.45%
HAWAII	\$228,695,753	2.22%
OKLAHOMA	\$466,749,017	2.17%
NEW JERSEY	\$1,913,822,835	2.08%
INDIANA	\$1,113,119,828	2.07%
NEW HAMPSHIRE	\$208,007,435	2.02%
GEORGIA	\$1,259,637,583	1.92%
MONTANA	\$109,015,383	1.92%
SOUTH CAROLINA	\$493,597,317	1.76%
ALABAMA	\$542,293,232	1.74%
NEVADA	\$265,196,034	1.67%
TENNESSEE	\$734,628,963	1.60%
KENTUCKY	\$418,365,151	1.52%
NORTH DAKOTA	\$57,644,057	1.52%
RHODE ISLAND	\$117,408,879	1.49%
NEBRASKA	\$185,149,979	1.48%
PENNSYLVANIA	\$1,492,414,055	1.46%
WEST VIRGINIA	\$158,882,588	1.44%
FLORIDA	\$1,593,684,394	1.44%
ARIZONA	\$425,033,484	1.31%
COLORADO	\$427,010,092	1.19%
SOUTH DAKOTA	\$50,333,077	1.14%
VIRGINIA	\$647,307,801	1.11%
OHIO	\$1,146,848,381	1.11%
ARKANSAS	\$166,849,022	1.00%
ILLINOIS	\$1,225,638,678	0.98%
MARYLAND	\$400,844,048	0.94%
MICHIGAN	\$866,906,368	0.90%
MAINE	\$73,633,632	0.86%
MINNESOTA	\$363,498,070	0.78%
CALIFORNIA	\$2,053,903,043	0.71%
DISTRICT OF COLUMBIA	\$39,348,838	0.34%
TEXAS	\$471,143,750	0.29%
MISSOURI	\$116,177,196	0.25%
MASSACHUSETTS	\$122,270,372	0.18%
NEW YORK	\$189,895,624	0.10%
CONNECTICUT	\$3,839,105	0.01%

SOURCE: U.S. DEPARTMENT OF LABOR, EMPLOYMENT AND TRAINING ADMIN., DIVISION OF ACTUARIAL SERVICES



QUARTERLY TRUST FUND REPORT

JUL 09 1996

DET RESEARCH

University of Massachusetts
JANUARY 1996
Depository Copy

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of December 1995, the Massachusetts Unemployment Insurance Trust Fund balance was \$514 million, with the private contributory account having a balance of \$469 million, and the governmental contributory account holding a \$45 million balance.

1995 IN REVIEW

The Massachusetts economy continued to improve through 1995, with the monthly average unemployment rate dropping to 5.1% in November from 6.0% in January. This decline in unemployment resulted in benefit payments of \$729 million for calendar year 1995, down from the \$777 paid to claimants in 1994. This level of payments during 1995, combined with \$1,060 million in private contributions, left a private contributory account balance of \$469 million. This is the most solvent, as measured in dollars that the private contributory account has been since the end of calendar year 1989.

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the short-term forecast produced by DRI in November 1995, modified by the Massachusetts Department of Revenue to reflect actual labor force data through November 1995. The simulations for the October 1995 report were produced based on forecasts produced by WEFA (Wharton Econometric Forecasting Associates). DET will utilize DRI forecasts for future reports.

The assumptions from the DRI forecast are arrayed below and compared to the October 1995 trust fund assumptions.

	Wage & Salary		Labor	
	Growth (%)		Force (000)	
	10/95	1/96	10/95	1/96
1996	4.4	5.1	3,235.9	3,185.6
1997	4.4	4.3	3,273.9	3,221.2
1998	5.0	4.4	3,304.8	3,251.4
1999	5.8	4.2	3,321.1	3,281.9
2000	N/A	4.5	N/A	3,311.8

	Total		Insured	
	Unemployment		Unemployment	
	Rate (%)		Rate (%)	
	10/95	1/96	10/95	1/96
1996	5.5	5.2	3.0	2.8
1997	5.7	5.2	3.0	2.9
1998	5.8	5.2	3.1	2.9
1999	5.5	5.3	2.9	2.9
2000	N/A	5.2	N/A	2.9

The current economic scenario calls for higher wage and salary growth in calendar year 1996 and a

smaller, though expanding, average labor force than was predicted in the October report.

The unemployment rate is forecast to be 5.2% for the years 1996 through 1998, rising to 5.3% in 1999 before dropping back to 5.2% in 2000. These rates are lower than the rates used in the October 1995 report.

Table 1 contains data concerning the annual activity in the private contributory account. Table 2 details the economic assumptions used in the Massachusetts Benefit Financing Simulation. As schedule "D" has been mandated by the legislature since 1993, Tables 1A and 2A show the impact of remaining on schedule "D" through the year 1999 before fund reserves would be sufficient to automatically trigger rate schedule "C" for the year 2000.

1996 OUTLOOK

Enactment of Chapter 224 of the Acts of 1995 (which establishes employer contributions based on schedule "D" for calendar year 1996) will result in an estimated \$1.044 billion in contributions, \$16 million less than was received in 1995, as employer contributions build their individual account balances and earn them lower contribution rates. As the average weekly wage increases and the projected insured unemployment rate rises to 2.8% in 1996 from the 2.6% actual rate experienced in 1995, benefit payments are estimated to be \$851 million, \$122 million more than was paid in 1995. The 1996 forecasted private contributory account balance of \$704 would be an improvement of \$235 million over the 1995 ending balance.



1997-2000 FORECAST**CURRENT LAW:**

Contributions to the private contributory account are expected to exceed benefit payments for the forecast years through 1999. In addition, interest earnings credited to the private contributory account over the five year forecast period allow the balance to grow to \$1.593 billion by the end of the year 2000 under current law. Schedule "F" is forecast to be triggered in 1997, but each successive year is expected to bring a one schedule drop in the contribution rate schedule used, bringing the system to schedule "C" for the years 1999 and 2000.

AN ALTERNATIVE:

As schedule "D" has been mandated since 1993, a scenario keeping the schedule of rates constant on schedule "D" through the year 2000 has also been provided in this report. The results of this scenario may be viewed in tables 1A and 2A on page 6. Under this scenario, the private contributory account balance at the end of the year 2000 is estimated to be \$1.528 billion.

Either ending balance would exceed the \$1.068 billion balance in the private contributory account recorded at the end of 1988, the largest dollar balance prior to the recession of the early 1990's. One measure the federal government uses to judge trust fund solvency is to calculate each state's year ending trust fund balance as a percent of annual total wages. Analyzing the year ending 1988 private contributory account balance using this methodology produces an account balance divided by total wages of 1.95%. Applying this methodology to the balances forecast for the end of the year 2000 produces an account balance divided by total wages of 1.77% under the current law scenario and an

account balance divided by total wages of 1.70% under the schedule "D" scenario. These results are depicted graphically on page 8, showing the projected balance of the private contributory account in any of these scenarios to be less prepared for a future economic decline than it was in 1988.

STRUCTURAL CONSIDERATIONS

It must be emphasized, however, that the Trust Fund's reserves are being rebuilt by placing an extraordinarily high cost burden on Massachusetts businesses.

Although modest reforms to the Massachusetts unemployment insurance benefit structure were enacted in 1992, the program is still among the most generous in the nation. Consequently, as the chart on page 9 indicates, Massachusetts employers paid on average nearly \$500 per employee in unemployment insurance contributions last year, making the state the third most expensive in the country on this important cost of doing business indicator. At the same time, the account's reserves, while seemingly returning in 1995 to impressive levels, in fact ranked last year 50th in the country, as a proportion of total wages.

In short, the Massachusetts unemployment insurance program as presently structured appears destined to continue burdening businesses with high costs, while failing to build adequate reserves so long as it continues to offer such an expensive benefit package. It is thus timely, as we begin 1996, to recall that the Administration's unemployment insurance reform proposal, now pending in the Legislature, (House Bill 4881), would provide for significant reductions in the financing burden now borne by Massachusetts



businesses, because it would control the program's benefit outlays.

The Administration's proposal would address three aspects of the present unemployment insurance program that are most out of line with national norms -- the maximum duration of benefits (chart A), the amount of prior work required to qualify for benefits (chart B), and the level of additional assistance provided to claimants with dependents (chart C). By conforming these elements of the program to peer-state standards, outlays would be sufficiently reined in to allow contribution rates to be reduced in 1997 by a full rate schedule, to "C", even while the fund's reserves continue to build.

Table 1B shows the five-year impact of this legislation on outlays, revenues, and the account balance, if it were enacted with the benefit reforms effective in July 1996 and the contribution rate reduction effective beginning in calendar year 1997.

Chart A

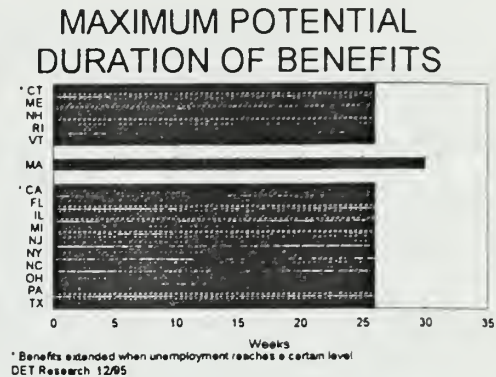


Chart B

LABOR FORCE ATTACHMENT
Qualifying Requirements

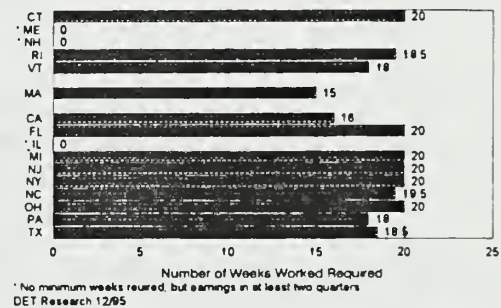


Chart C

MAXIMUM WEEKLY DEPENDENTS ALLOWANCE

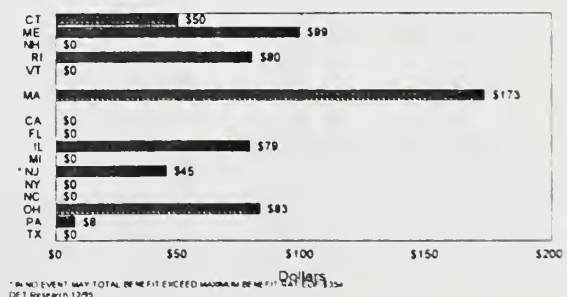




Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1995	1996	1997	1998	1999	2000
Balance, Jan 1	\$122	\$469	\$704	\$1,154	\$1,400	\$1,505
Net Income	\$1,060	\$1,044	\$1,248	\$1,042	\$924	\$923
Trust Fund Interest	\$16	\$42	\$76	\$111	\$128	\$137
Net Benefits	\$729	\$851	\$875	\$907	\$946	\$972
Balance, Dec 31	\$469	\$704	\$1,154	\$1,400	\$1,505	\$1,593
Schedule	"D"	"D"	"F"	"D"	"C"	"C"

Figures may not add due to rounding

Table 2

Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1995	\$70.6	\$24.4	2,804	4.3	34.6	1.00*	5.4	2.8
1996	\$70.6	\$24.6	2,771	4.3	33.4	0.92	5.2	2.9
1997	\$77.4	\$25.1	2,803	5.1	32.4	1.07	5.2	2.9
1998	\$81.4	\$25.5	2,829	4.0	31.3	0.68	5.2	2.9
1999	\$85.4	\$26.0	2,855	3.5	30.4	0.72	5.3	2.9
2000	\$89.8	\$26.5	2,882	3.5	29.5	0.61	5.2	2.9

* DET estimate, not model output.

Figures may not add due to rounding



Schedule "D" Through 1999 with Schedule "C" in 2000

Table 1A

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1995	1996	1997	1998	1999	2000
Balance, Jan 1	\$122	\$469	\$704	\$969	\$1,209	\$1,426
Net Income	\$1,060	\$1,044	\$1,070	\$1,053	\$1,048	\$944
Trust Fund Interest	\$16	\$42	\$70	\$94	\$115	\$130
Net Benefits	\$729	\$851	\$875	\$907	\$946	\$972
Balance, Dec 31	\$469	\$704	\$969	\$1,209	\$1,426	\$1,528
Schedule	"D"	"D"	"D"	"D"	"D"	"C"

Figures may not add due to rounding

Table 2A

Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1996	\$70.6	\$24.4	2,804	4.3	34.6	1.00*	5.4	2.8
1996	\$73.6	\$24.6	2,771	4.3	33.4	0.92	5.2	2.8
1997	\$77.4	\$25.1	2,803	4.3	32.4	1.08	5.2	2.9
1998	\$81.4	\$25.5	2,829	4.1	31.3	0.74	5.2	2.9
1999	\$85.4	\$26.0	2,855	4.0	30.4	0.78	5.3	2.9
2000	\$89.8	\$26.5	2,882	3.5	29.5	0.64	5.2	2.9

* DET estimate, not model output.

Figures may not add due to rounding



H4881 FOR 1997 WITH CONTINUATION OF SCHEDULE "C"

Table 1B

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ Millions)

	1995	1996	1997	1998	1999	2000
Balance, Jan 1	\$122	\$469	\$730	\$1,003	\$1,262	\$1,501
Net Income	\$1,060	\$1,045	\$986	\$965	\$958	\$947
Trust Fund Interest	\$16	\$43	\$73	\$97	\$120	\$141
Net Benefits	\$729	\$827	\$786	\$803	\$839	\$892
Balance, Dec 31	\$469	\$730	\$1,003	\$1,262	\$1,501	\$1,697
Schedule	"D"	"D"	"C"	"C"	"C"	"C"

Figures may not add due to rounding

Table 2B

Economic Assumptions
Economic Assumptions Based on DET Research Department Adjustments to
DRI Forecasts and Massachusetts Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate (%)	Contributory Wage Proportion (%)	Solvency Assessment (%)	Total Unemployment Rate (%)	Insured Unemployment Rate (%)
1995	\$70.6	\$24.4	2,804	4.3	34.6	1.00*	5.4	2.8
1996	\$73.6	\$24.7	2,774	4.3	33.6	0.91	5.2	2.8**
1997	\$77.6	\$25.3	2,811	3.9	32.6	0.98	5.2	2.6**
1998	\$81.6	\$25.8	2,838	3.7	31.6	0.60	5.2	2.6**
1999	\$85.6	\$26.3	2,864	3.7	30.7	0.62	5.3	2.6**
2000	\$90.0	\$26.7	2,889	3.5	29.7	0.46	5.2	2.6**

* DET estimate, not model output.. ** DET Research assumptions to reflect benefit reductions required by H4881, effective July 1, 1996
Figures may not add due to rounding

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

PHYSICAL CHEMISTRY

LECTURE NOTES

BY

PROFESSOR

JOHN D. COLE

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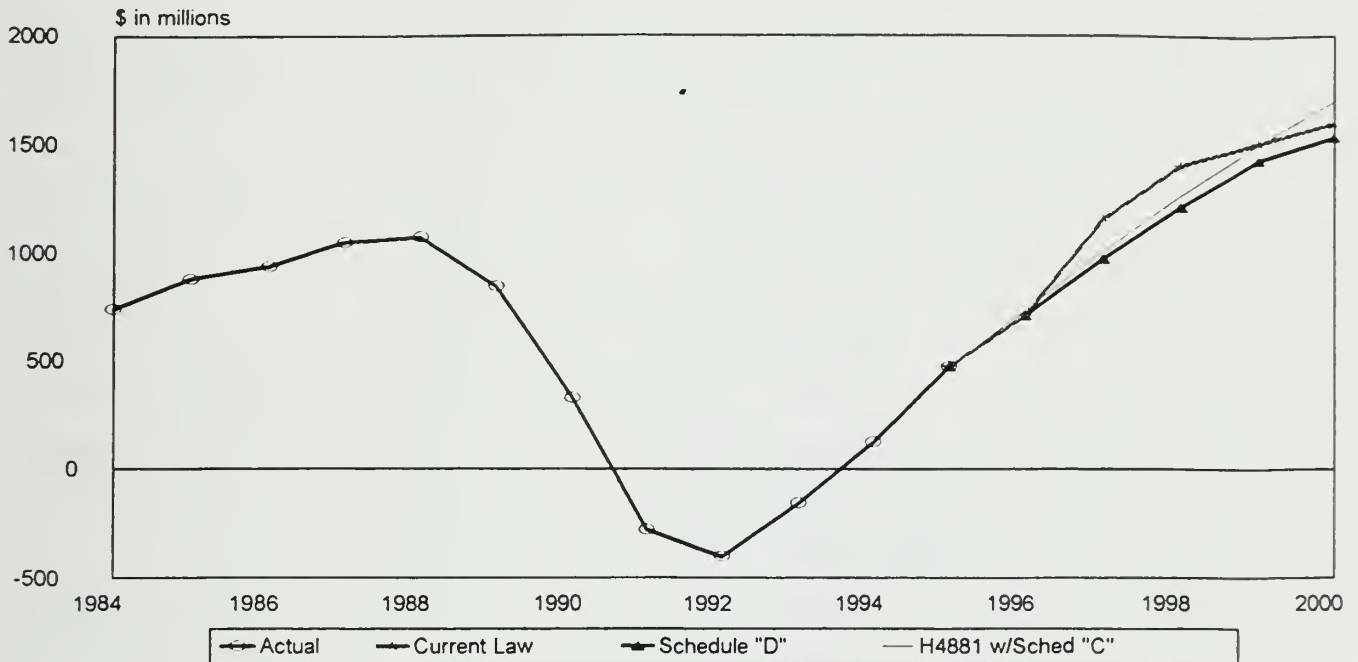
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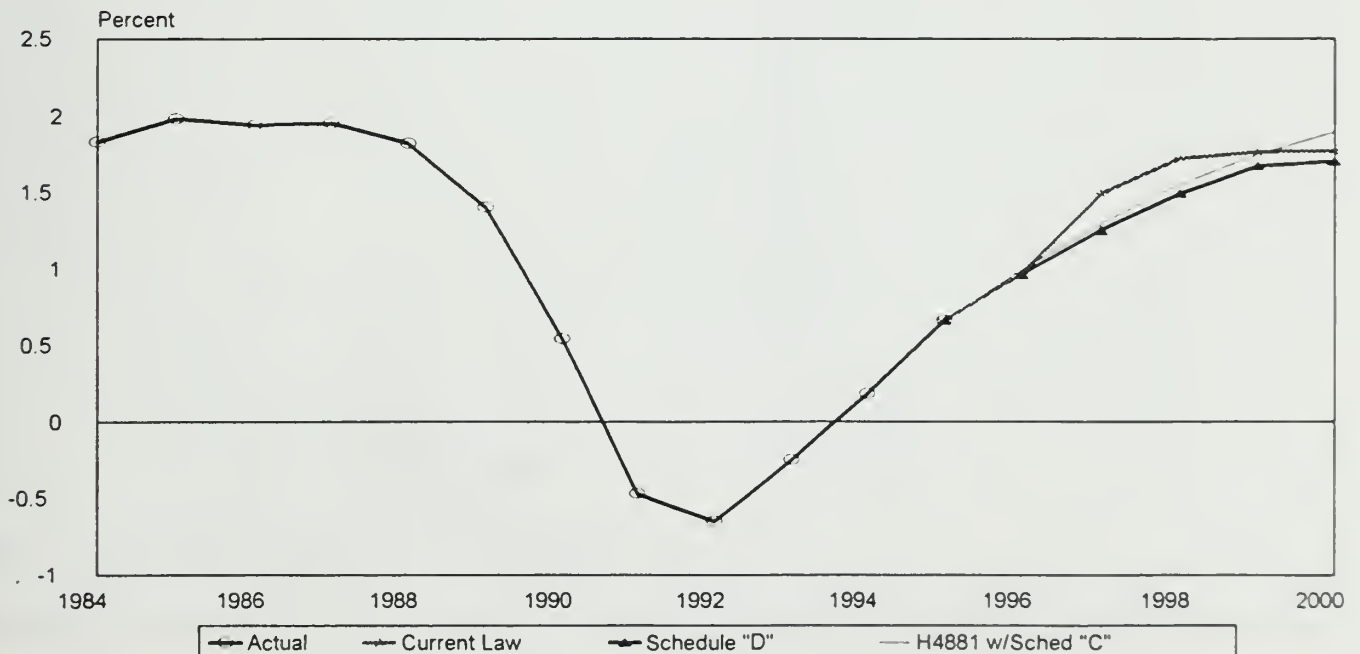
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UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only in Dollars



Private Account Balance as % of Total Wages





**UNEMPLOYMENT INSURANCE AS A COST OF DOING BUSINESS:
STATES RANKED BY COST PER EMPLOYEE
(AVERAGE, 1995)**

Rhode Island	\$537	Mississippi	\$182
MASSACHUSETTS	\$485	Montana	\$178
Alaska	\$455	New Mexico	\$175
Michigan	\$420	Louisiana	\$162
Connecticut	\$410*	Wyoming	\$152
Pennsylvania	\$407	Florida	\$144
Hawaii	\$343	Tennessee	\$144
New York	\$341	South Carolina	\$135
Washington	\$317	Colorado	\$131
New Jersey	\$304	Texas	\$130
Illinois	\$294	New Hampshire	\$128
Maryland	\$278	Virginia	\$128
West Virginia	\$275	Georgia	\$127
California	\$271	Missouri	\$124
Ohio	\$263	Arizona	\$122
Delaware	\$255	North Dakota	\$118
Maine	\$244	Utah	\$113
Nevada	\$228	Iowa	\$112
Wisconsin	\$221	Indiana	\$100
Minnesota	\$213	Alabama	\$ 94
Arkansas	\$209	Oklahoma	\$ 88
Vermont	\$207	Kansas	\$ 69
Oregon	\$198	Nebraska	\$ 65
Idaho	\$197	South Dakota	\$ 57
Kentucky	\$183 (Median)	North Carolina	\$ 47

*Does not include bond excise @ \$123 per employee.

Computed by DET based on U.S. Dept. of Labor UIS Division of Actuarial Services, 3rd Quarter CY'95 UI Data Summary



AUG 14 1996

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QUARTERLY TRUST FUND REPORT

DET RESEARCH

APRIL 1996

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of February 1996, the Massachusetts Unemployment Insurance Trust Fund balance was \$469 million, with the private contributory account having a balance of \$421 million, and the governmental contributory account holding a \$48 million balance.

1996 TO DATE

Actual activity for the first quarter of 1996 is running close to the estimates created by the benefit financing simulation. Based on actual activity through the week ending March 23, 1996 it is estimated that payments from the private contributory trust fund account will be approximately \$260 million compared to the simulation estimate of \$256 million. The average weeks claimed for the first quarter are estimated by DET to be 92,000 compared to the 95,000 estimated by the benefit financing simulation.

E Department of
Employment
and Training

This report is prepared by the Economic
Research Service of the Massachusetts
Department of Employment and Training.
Any questions can be directed to DET at
(617) 626-6572

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation DET has utilized the short-term forecast produced by DRI in November 1995, as modified by the Massachusetts Department of Revenue to reflect actual labor force data through December 1995.

The assumptions from the DRI forecast are arrayed below and compared to the January 1996 trust fund assumptions.

	WAGE & SALARY		LABOR	
	GROWTH (%)		FORCE (000)	
	1/96	4/96	1/96	4/96
1996	5.1	5.5	3,185.6	3,188.5
1997	4.3	4.3	3,221.2	3,223.9
1998	4.4	4.4	3,251.4	3,254.1
1999	4.2	4.2	3,281.9	3,284.7
2000	4.5	4.5	3,311.8	3,314.6

	TOTAL		INSURED	
	UNEMPLOYMENT		UNEMPLOYMENT	
	RATE (%)		RATE (%)	
	1/96	4/96	1/96	4/96
1996	5.2	5.2	2.8	2.8
1997	5.2	5.3	2.9	2.9
1998	5.2	5.2	2.9	2.9
1999	5.3	5.3	2.9	2.9
2000	5.2	5.2	2.9	2.9

The current economic scenario is nearly identical to the forecast used in the January Report except for: a slightly higher labor force for all the years of the forecast range and higher wage and salary growth in 1996.

The unemployment rate, forecast to be 5.2% for 1996, rises marginally to 5.3% in 1997 and then alternates between 5.2% and 5.3% for the years

through 2000.

Table 1 contains data concerning the annual activity in the private contributory account under current law. Table 2 details the economic assumptions used in the Massachusetts Benefit Financing Simulation. Since schedule "D" has been mandated by the legislature since 1993, Tables 1A and 2A show the impact of remaining on schedule "D" through the year 2000.

1996 OUTLOOK

Enactment of Chapter 224 of the Acts of 1995 (which establishes employer contributions based on schedule "D" for calendar year 1996) will result in an estimated \$1.036 billion in contributions, \$24 million less than was received in 1995. Although on the same rate schedule, employers have built their individual account balances and earned lower individual 1996 rates. This is reflected by the drop in the average estimated contribution rate for 1996. The January report had private contributory employers with a 4.3% contribution rate. This forecast projects an average 4.2% rate. As the average weekly wage in Massachusetts increases, and the projected insured unemployment rate rises to 2.8% in 1996, benefit payments are estimated to be \$846 million, \$117 million more than was paid in 1995. The December 1996 forecast private contributory account balance of \$704 would be an improvement of \$235 million over the 1995 ending balance.

1997 - 2000 FORECAST

Current Law:

For the forecast years 1997-1999 it is expected that income in the form of employer contributions and

earned interest which will be credited to the private contributory account will exceed outflows for the duration of the forecast period. This will allow trust fund reserves to continue to expand and result in a private contributory account balance of \$1.347 billion at the end of calendar year 2000. Under current law, and without statutory intervention, rate schedule "F" will be triggered for 1997. Schedule "D" will be triggered for both 1998 and 1999 before dropping to schedule "C" in 2000.

An Alternative:

Given that schedule "D" has been legislated each year since 1993, this report includes a scenario which would hold the contributory rate schedules on schedule "D" through the year 2000. Under the schedule "D" scenario, the private contributory account balances would continue to grow and would end the year 2000 with a \$1.267 billion balance. The results of this scenario and the underlying economic assumptions can be viewed on table 1A and 2A.

Another Alternative:

In the January 1996 report another alternative was outlined, and again the Administration's unemployment insurance reform package (House Bill 4881) is presented for consideration.

This proposal requires three specific benefit reforms: reduce the maximum potential weeks of eligibility, increase the number of weeks of work required to qualify for benefits, and place restrictions on the level of further assistance provided to claimants with dependents. These benefit reforms are assumed to become effective June 30, 1996 and are expected to continue throughout the forecast period. A drop to contribution rate schedule "C" through the year 2000 could be combined with these benefit reforms.

Table 1B and 2B show the impact of the benefit reforms. Under this scenario the private contributory account balance would be \$1.358 billion at the end of calendar year 2000.

While the economic assumptions have remained relatively unchanged, the year ending 2000 balances under each of the three scenarios is lower in the April report than in the January report as a result of the annual average contribution rates being lower under all of the scenarios. This reflects the improving conditions of employer accounts.

AVERAGE COST PER EMPLOYEE

The improving condition of employer accounts can also be measured by the average cost per employee. Massachusetts' average cost per employee peaked at \$486 in 1994, before dropping to approximately \$476 in 1995, and is estimated to drop again to \$470 in 1996. For 1997 under current law (schedule "F"), the estimated average cost per employee would rise to \$539. Under the alternative option of remaining on schedule "D" in 1997, the rate would decline to \$459 and if House Bill 4881 is enacted, the average employee cost would drop to \$420 using schedule "C".



Table 1

Massachusetts Benefit Financing Simulation

Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE JAN 1	\$122	\$469	\$704	\$1,093	\$1,258	\$1,363
INCOME	\$1,060	\$1,036	\$1,200	\$985	\$953	\$853
TRUST FUND INTEREST	\$16	\$45	\$77	\$105	\$117	\$123
OUTLAYS	\$729	\$846	\$888	\$925	\$966	\$992
BALANCE, DEC 31	\$469	\$704	\$1,093	\$1,258	\$1,363	\$1,347
SCHEDULE	D	D	F	D	D	C
AVERAGE COST/EMPLOYEE	\$476	\$470	\$539	\$440	\$423	\$375

Figures may not add because of rounding.

Table 2

Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1995	\$71.8	\$24.5	2,819	4.3%	34.1%	1.27%	5.4%	2.6%
1996	\$75.0	\$24.9	2,831	4.2%	33.2%	0.88%	5.2%	2.8%
1997	\$78.9	\$25.3	2,862	4.8%	32.1%	1.06%	5.3%	2.9%
1998	\$82.9	\$25.8	2,889	3.7%	31.1%	0.70%	5.2%	2.9%
1999	\$87.0	\$26.2	2,915	3.6%	30.1%	0.77%	5.3%	2.9%
2000	\$91.6	\$26.7	2,943	3.2%	29.1%	0.67%	5.2%	2.9%

Figures may not add because of rounding.

Table 1A

Massachusetts Benefit Financing Simulation
Net Effect of Recommended Schedule "D"

Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE, JAN 1	\$122	\$469	\$704	\$908	\$1,063	\$1,178
INCOME	\$1,060	\$1,036	\$1,021	\$992	\$981	\$971
TRUST FUND INTEREST	\$16	\$45	\$71	\$88	\$100	\$110
OUTLAYS	\$729	\$846	\$888	\$925	\$966	\$992
BALANCE, DEC 31	\$469	\$704	\$908	\$1,063	\$1,178	\$1,267
SCHEDULE	D	D	D	D	D	D
AVERAGE COST/EMPLOYEE	\$476	\$470	\$459	\$443	\$435	\$427

Figures may not add because of rounding.

TABLE 2A

Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1995	\$71.8	\$24.5	2,819	4.3%	34.1%	1.27%	5.4%	2.6%
1996	\$75.0	\$24.9	2,831	4.2%	33.2%	0.88%	5.2%	2.8%
1997	\$78.9	\$25.3	2,862	4.0%	32.1%	1.07%	5.3%	2.9%
1998	\$82.9	\$25.8	2,889	3.8%	31.1%	0.76%	5.2%	2.9%
1999	\$87.0	\$26.2	2,915	3.7%	30.1%	0.84%	5.3%	2.9%
2000	\$91.6	\$26.7	2,943	3.6%	29.1%	0.73%	5.2%	2.9%

Figures may not add because of rounding.



Table 1B

Massachusetts Benefit Financing Simulation
Net Effect of H4881 with Schedule "C"
Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE, JAN 1	\$122	\$469	\$725	\$938	\$1,116	\$1,266
INCOME	\$1,060	\$1,037	\$936	\$906	\$897	\$883
TRUST FUND INTEREST	\$16	\$45	\$73	\$91	\$106	\$119
OUTLAYS	\$729	\$826	\$796	\$819	\$854	\$910
BALANCE, DEC 31	\$469	\$725	\$938	\$1,116	\$1,266	\$1,358
SCHEDULE	D	D	C	C	C	C
AVERAGE COST/EMPLOYEE	\$476	\$470	\$420	\$403	\$396	\$388

Figures may not add because of rounding.

TABLE 2B

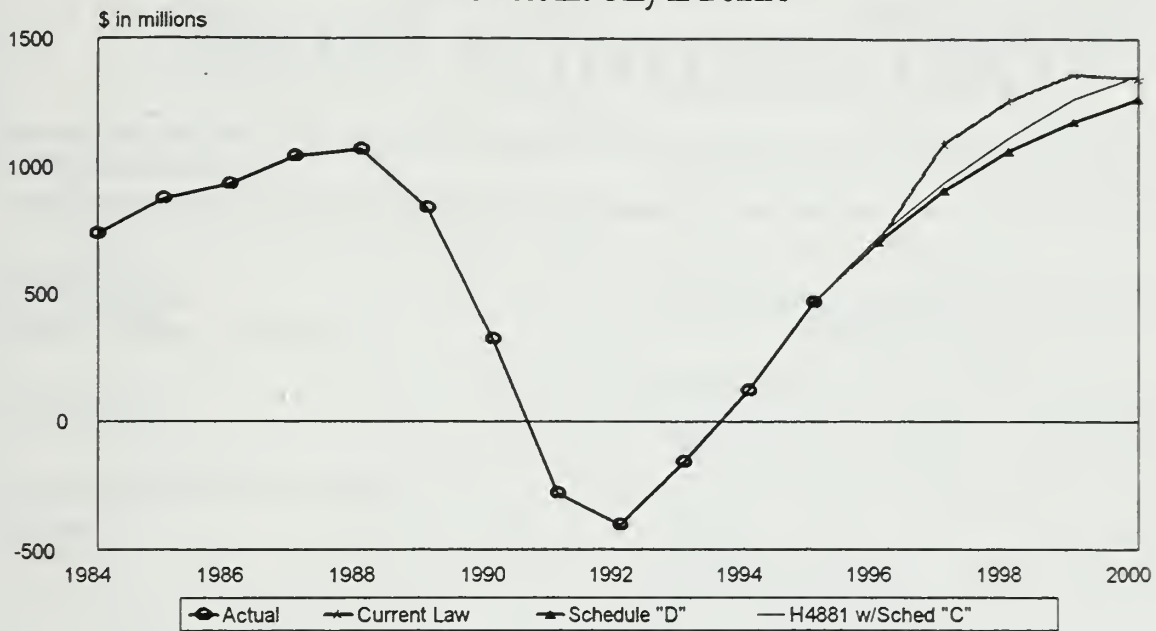
Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

YEAR	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Total Unemployment Rate	Insured Unemployment Rate
1995	\$71.8	\$24.5	2,819	4.3%	34.1%	1.27%	5.4%	2.6%
1996	\$75.1	\$24.9	2,833	4.2%	33.2%	0.87%	5.2%	2.8%
1997	\$79.1	\$25.6	2,870	3.6%	32.4%	0.97%	5.3%	2.6%
1998	\$83.2	\$26.0	2,898	3.5%	31.3%	0.63%	5.2%	2.6%
1999	\$87.3	\$26.5	2,924	3.4%	30.4%	0.68%	5.3%	2.6%
2000	\$91.8	\$26.9	2,949	3.3%	29.3%	0.55%	5.2%	2.6%

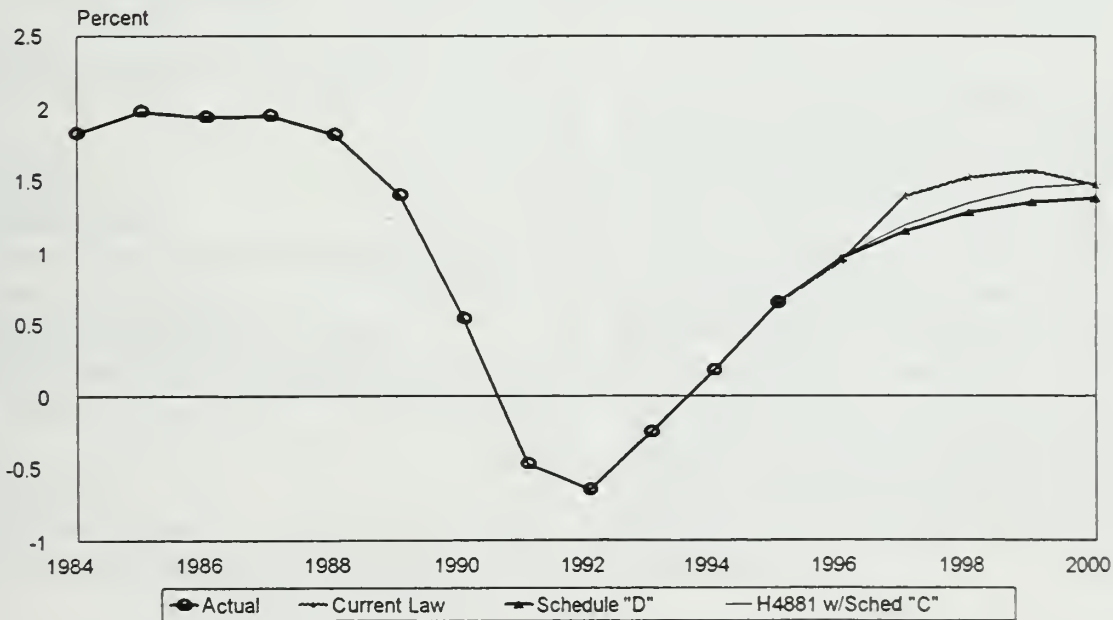
Figures may not add because of rounding.

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only in Dollars



Private Account Balance as a % of Total Wages





QUARTERLY TRUST FUND REPORT

NOV 14 1996

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DET RESEARCH

AUGUST 1996

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of June 1996, the Massachusetts Unemployment Insurance Trust Fund balance was \$736 million, with the private contributory account having a balance of \$687 million, and the governmental contributory account holding a \$49 million balance.

1996 TO DATE

For the first two quarters of 1996, \$651 million in contributions were credited to the private contributory account, \$9 million less than was forecast in the April report. Benefits charged against the private contributory account for the first two quarters of 1996 were \$419 million, significantly below the \$467 million in benefits forecast in the April trust fund report. The bulk of this difference occurred in the second quarter, when benefit payments were \$35 million below the April estimate. Continued weeks claimed averaged 10,000 a week below the April estimates. The average weekly benefit amount was \$247, as estimated by the April forecast.

E Division of
Employment
and Training

This report is prepared by the Economic
Research Service of the Massachusetts
Division of Employment and Training. Any
questions can be directed to DET at (617)
626-6572

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ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in May 1996, as modified by the Massachusetts Department of Revenue to reflect actual labor force data through April 1996.

The assumptions from the DRI forecast are arrayed below and compared to the April 1996 trust fund assumptions.

	WAGE & SALARY GROWTH (%)		LABOR FORCE (000)	
	4/96	8/96	4/96	8/96
1996	5.5	6.5	3,188.5	3,192.0
1997	4.3	4.2	3,223.9	3,210.8
1998	4.4	4.2	3,254.1	3,231.7
1999	4.2	4.7	3,284.7	3,259.3
2000	4.5	4.7	3,314.6	3,291.1

	TOTAL UNEMPLOYMENT RATE (%)		INSURED UNEMPLOYMENT RATE (%)	
	4/96	8/96	4/96	8/96
1996	5.2	4.9	2.8	2.7
1997	5.3	4.9	2.9	2.8
1998	5.2	4.8	2.9	2.7
1999	5.3	4.5	2.9	2.6
2000	5.2	4.4	2.9	2.6

The current economic scenario differs from the April scenario in the following ways: the labor force continues to grow in all of the years of the forecast frame at a slightly lower level. Growth in wage and salary disbursements is expected to be 6.5% for 1996, up from the April forecast of 5.5%. The growth is expected to be 4.2% in 1997, 4.2% in 1998 and rise to 4.7% for 1999 and 2000. The unemployment rate is forecast to be 4.9% for 1996 and 1997, but then declines in each of the following years to end at 4.4%

in the year 2000. This is a significant departure from the April forecast which called for the unemployment rate to run in the 5.2% to 5.3% range for all of the years of the forecast. The insured unemployment rate is forecast to be 2.7% for 1996, then rise slightly to 2.8% in 1997 before declining to 2.6% in 2000. The forecast insured unemployment rate continues to remain higher than the experience of the first six months of 1996.

Table 1 contains data concerning the annual activity in the private contributory account under current law. Table 2 details the economic assumptions used in the Massachusetts Benefit Financing Simulation. Tables 1A and 2A show the impact of using rate schedule "D" in 1997 as proposed by House 6164.

1996 OUTLOOK

Enactment of Chapter 224 of the Acts of 1995 (which established employer contributions based on schedule "D" for calendar year 1996) will result in an estimated \$1.039 billion in contributions with an average employer contribution rate of 4.2%. Benefits estimated by the simulation are expected to total \$779 million for the year (down from the April estimate of \$846 million). This is based on a drop in the forecast total unemployment rate to 4.9% for this year, leading to an insured unemployment rate of 2.7%. Under this scenario, the private contributory account would end 1996 with a balance of \$777 million, an improvement of \$308 million over the 1995 ending balance. As contributions are expected to exceed benefits, employers will continue to build their individual account balances and earn lower future individual rates.

It should be noted that actual claims activity for the first two quarters of 1996 ran 4% below last year's activity. DET estimates that benefits for 1996 will



be \$732 million, \$47 million less than the simulation estimate. The private contributory account balance at the end of 1996 is estimated to be \$824 million. Unless the legislature enacts a schedule freeze, contribution rate schedule "F" will be triggered by current law for 1997.

1997 - 2000 FORECAST

Absent any further legislative action, 1996 will mark the first time since 1992 that the trust fund reserves would be used to automatically trigger the contribution rate schedule used for 1997. Rate schedule "F" is estimated to generate \$1.196 billion in contributions during 1997, an increase of \$157 million over 1996. Benefits, estimated to be \$849 million, would leave a forecast balance in the private contributory account of \$1.206 billion.

Total and insured unemployment rates are now expected to be lower than the April assumptions for each of the forecast years 1997-2000. The simulation estimates that income in the form of employer contributions and earned interest credited to the private contributory account will exceed outflows for the duration of the forecast period. This would allow trust fund reserves to continue to expand and result in a private contributory account balance of \$1.614 billion at the end of calendar year 2000. Under this scenario and current law, schedule "D" would trigger for 1998 before dropping to schedule "C" in 1999 and 2000.

AVERAGE COST PER EMPLOYEE

The improving condition of employer accounts can also be reflected in the declining average cost per employee. Massachusetts' average cost per employee peaked at \$486 in 1994, before dropping to approximately \$473 in 1995. It is estimated to drop again to \$471 in 1996. For 1997, under current law (schedule "F"), the estimated average cost per employee would rise to \$539. The average cost per employee figures for the remaining years are included in tables 1 and 1A.

ALTERNATIVE SCHEDULE "D" IN 1997

If schedule "D" were to be in place for 1997, the impact on the private contributory account would be to lower contributions to \$1.017 billion in 1997, a reduction in contributions of \$179 million when compared to current law. Schedule "E" would then be triggered for 1998, and drop to "D" in 1999 and "C" in the year 2000. The overall private contributory balance would be \$1.636 at the end of calendar year 2000. Under the schedule "D" scenario, the average cost per employee would be \$458 in 1997.

Table 1

Massachusetts Benefit Financing Simulation

Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE JAN 1	\$122	\$469	\$777	\$1,206	\$1,426	\$1,544
INCOME	\$1,060	\$1,039	\$1,196	\$971	\$847	\$833
TRUST FUND INTEREST	\$16	\$48	\$82	\$114	\$130	\$140
OUTLAYS	\$729	\$779	\$849	\$865	\$859	\$903
BALANCE, DEC 31	\$469	\$777	\$1,206	\$1,426	\$1,544	\$1,614
SCHEDULE	D	D	F	D	C	C
AVERAGE COST/EMPLOYEE	\$473	\$471	\$539	\$436	\$377	\$369

Figures may not add because of rounding.

Table 2

Economic Assumptions

Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contri- butory Payroll (billions)	Covered Employment (thousands)	Effective Contri- bution Rate	Contri- butory Wage Proportion	Solvency Assess- ment	Trust Fund Balance as a % of Total Payroll	Total Unemploy- ment Rate	Insured Unemploy- ment Rate
1995	\$72.2	\$24.6	2,860	4.3%	34.1%	1.27%	0.65%	5.4%	2.6%
1996	\$75.7	\$24.9	2,833	4.2%	32.9%	0.81%	1.03%	4.9%	2.7%
1997	\$79.3	\$25.4	2,854	4.8%	32.0%	1.00%	1.52%	4.9%	2.8%
1998	\$83.0	\$25.8	2,874	3.7%	31.1%	0.59%	1.72%	4.8%	2.7%
1999	\$87.5	\$26.3	2,901	3.2%	30.1%	0.61%	1.76%	4.5%	2.6%
2000	\$92.3	\$26.8	2,929	3.1%	29.0%	0.49%	1.75%	4.4%	2.6%

Figures may not add because of rounding.

1. Introduction

2. Methodology

3. Results

4. Discussion

5. Conclusion

Table 1: Summary of Results	
Parameter	Value
Mean	1.2
Standard Deviation	0.5
Minimum	0.0
Maximum	2.0

Table 1A

Massachusetts Benefit Financing Simulation
Net Effect of Proposed Schedule "D"
Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE JAN 1	\$122	\$469	\$777	\$1,020	\$1,326	\$1,557
INCOME	\$1,060	\$1,039	\$1,017	\$1,071	\$964	\$841
TRUST FUND INTEREST	\$16	\$48	\$76	\$100	\$125	\$141
OUTLAYS	\$729	\$779	\$849	\$865	\$859	\$903
BALANCE, DEC 31	\$469	\$777	\$1,020	\$1,326	\$1,557	\$1,636
SCHEDULE	D	D	D	E	D	C
AVERAGE COST/EMPLOYEE	\$473	\$471	\$458	\$481	\$430	\$372

Figures may not add because of rounding.

Table 2A

Economic Assumptions
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contributory Rate	Contributory Wage Proportion	Solvency Assessment	Trust Fund Balance as a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1995	\$72.2	\$24.6	2,860	4.3%	34.1%	1.27%	0.65%	5.4%	2.6%
1996	\$75.7	\$24.9	2,833	4.2%	32.9%	0.81%	1.03%	4.9%	2.7%
1997	\$79.3	\$25.4	2,854	4.0%	32.0%	1.01%	1.29%	4.9%	2.8%
1998	\$83.0	\$25.8	2,874	4.2%	31.1%	0.65%	1.60%	4.8%	2.7%
1999	\$87.5	\$26.3	2,901	3.6%	30.1%	0.64%	1.78%	4.5%	2.6%
2000	\$92.3	\$26.8	2,929	3.1%	29.0%	0.48%	1.77%	4.4%	2.6%

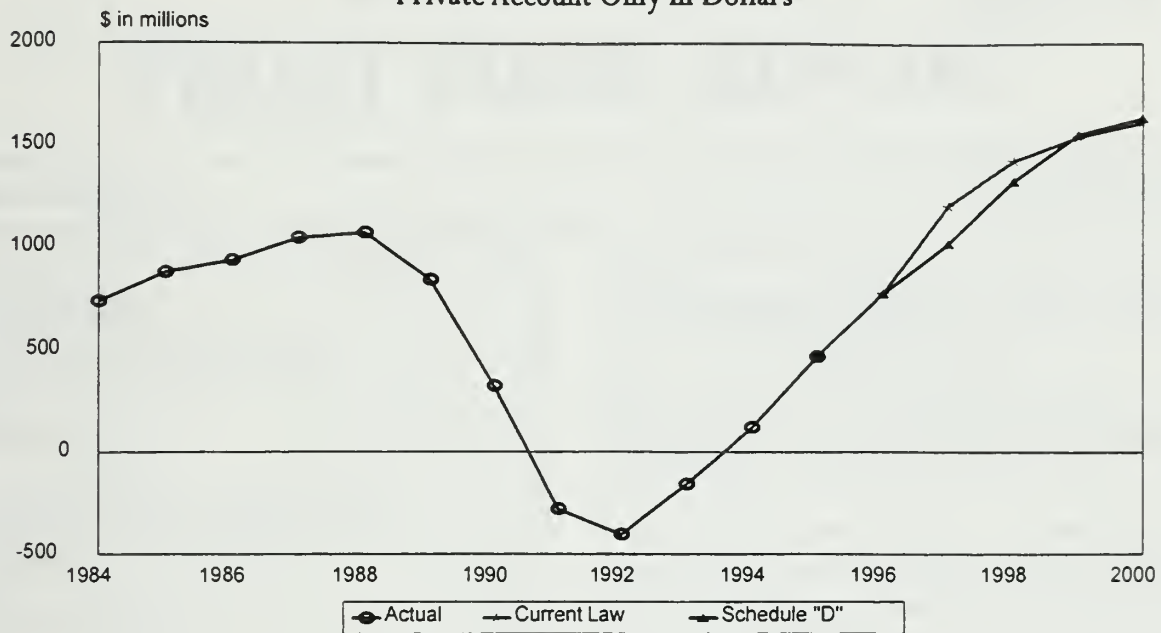
Figures may not add because of rounding.

Table 1: Summary of Data	
Category	Value
Item 1	100
Item 2	200
Item 3	300
Item 4	400
Item 5	500
Item 6	600
Item 7	700
Item 8	800
Item 9	900
Item 10	1000

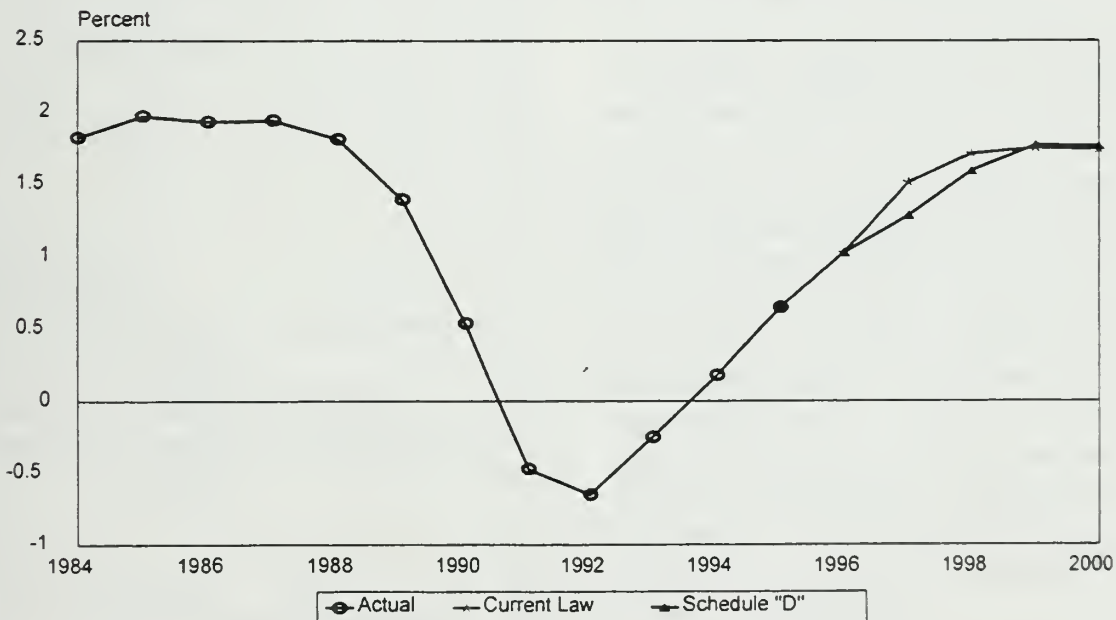
Table 2: Detailed Data	
Category	Value
Item 1	100
Item 2	200
Item 3	300
Item 4	400
Item 5	500
Item 6	600
Item 7	700
Item 8	800
Item 9	900
Item 10	1000

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only in Dollars



Private Account Balance as a % of Total Wages





FEB 7 1997

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QUARTERLY TRUST FUND REPORT

DET RESEARCH

OCTOBER 1996

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of September 1996, the Massachusetts Unemployment Insurance Trust Fund balance was \$852 million, with the private contributory account having a balance of \$802 million, and the governmental contributory account holding a \$50 million balance.

1996 TO DATE

Preliminary data for 1996 shows third quarter contributions credited to the private contributory account were approximately \$245 million, \$6 million less than was forecast in the August report. Actual benefit payment activity for the third quarter indicates that benefits charged against the private contributory fund will be approximately \$152 million. This is \$28 million less than the August simulation forecast. Benefit payments from the private contributory account for the first three quarters of 1996 were \$571 million. This compares to the April estimate of \$663 million in benefit payments estimated for the first three quarters of 1996. Contributions credited to the private contributory account in the first three quarters amounted to \$896 million, compared to the April estimate of \$899 million.

E Division of
Employment
and Training

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Research Office of the Massachusetts
Division of Employment and Training. Any
questions can be directed to DET at (617)
626-6572.

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100	100

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in August 1996.

The assumptions from the DRI forecast are arrayed below and compared to the August 1996 trust fund assumptions.

	WAGE & SALARY GROWTH%			TOTAL UNEMPLOYMENT RATE%		
	4/96	8/96	10/96	4/96	8/96	10/96
1996	5.5	6.5	5.7	5.2	4.9	4.8
1997	4.3	4.2	3.9	5.3	4.9	4.6
1998	4.4	4.2	3.5	5.2	4.8	4.6
1999	4.2	4.7	3.8	5.3	4.5	4.4
2000	4.5	4.7	4.3	5.2	4.4	4.2

	LABOR FORCE		
	4/96	8/96	10/96
1996	3,188,500	3,192,000	3,190,500
1997	3,223,900	3,210,800	3,212,300
1998	3,254,100	3,231,700	3,235,500
1999	3,284,700	3,259,300	3,261,900
2000	3,314,600	3,291,100	3,290,200

The current economic scenario compares to the August scenario in the following ways: the labor force continues to grow in all of the years in a pattern similar to the August forecast. Wage and salary disbursements are expected to grow at lower rates than were forecast in August, with the growth rates expected to be: 0.8% lower in 1996, 0.3% lower in 1997, 0.7% lower in 1998, 0.9% lower in 1999 and 0.4% lower in 2000. The total unemployment rate is expected to decline gradually throughout the duration of the forecast: with the rate forecast to be 4.8% in 1996, 4.6% in 1997 and 1998, and then declining to 4.4% in 1999 and 4.2% in 2000. These rates are 0.1% to 0.3% lower than was forecast in August.

For 1996, the forecast total unemployment rate of 4.8% is slightly higher than the actual experience of the first eight months, where the seasonally adjusted rate is 4.7%.

Table 1 contains data concerning the annual activity in the private contributory account under current law. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1996 OUTLOOK

Enactment of Chapter 224 of the Acts of 1995 (which established employer contributions based on schedule "D" for calendar year 1996) will result in an estimated \$1.037 billion in contributions with an average employer contribution rate of 4.1%. Based on a forecasted total unemployment rate of 4.8% for this year, which translates into an insured unemployment rate of 2.6%, benefits estimated by the simulation are expected to total \$766 million. Under this scenario, the private contributory account would end 1996 with a balance of \$788 million, an improvement of \$319 million over the 1995 ending balance. As contributions are expected to exceed benefits, employers will continue to build their individual account balances and earn lower individual rates.

Benefit payments continue to be below model estimates, with actual activity 15% below the simulation estimate for the third quarter. If this trend continues through the rest of this year, it would yield benefit payments of \$142 million for the fourth quarter, resulting in \$713 million in benefit payments for 1996. The reduced benefit payments would leave a private contributory account balance of \$841 million at the end of 1996.

1997 - 2000 FORECAST

Absent any further legislative action, DET has calculated that contribution rate schedule "E" will be in effect for contributions based on 1997 wages. This would mark the first time since 1992 that the trust fund reserves on September 30 were used to automatically trigger the contribution rate schedule for the following year. Rate schedule "E" is estimated to generate \$1.107 billion in contributions during 1997, an increase of \$70 million over 1996. Benefits, estimated to be \$817 million, would leave a forecast balance in the private contributory account of \$1.158 billion on December 31, 1997.

The simulation estimates that under schedule "E" in 1997, schedule "D" would trigger for 1998 before dropping to schedule "C" in 1999 and 2000. Income in the form of employer contributions and earned interest credited to the private contributory account will exceed outflows for the duration of the forecast period through the year 2000. This would allow trust fund reserves to continue to expand and result in a private contributory account balance of \$1.661 billion at the end of calendar year 2000.

AVERAGE COST PER EMPLOYEE

The improving condition of individual employer accounts can also be seen in the declining average cost per employee even though rates have been set at Schedule "D" for the 1993 through 1996 period. Massachusetts' average cost per employee peaked at \$486 in 1994, before dropping to approximately \$473 in 1995. It is estimated to be \$468 in 1996. For 1997, under current law (schedule "E"), the estimated average cost per employee would rise to \$498. The average cost per employee figures for the remaining years are included in tables 1 and 1A.

STATUTORY REQUIRMENTS

Section 54 of Chapter 118 of the Acts of 1992 requires DET to notify the legislature if contributions for any calendar year are expected to exceed 1.75% of total wages. Based on estimates produced by the Simulation, contributions under contribution rate schedule "E" are expected to equal 1.41% in 1997 and 1.18% if rate schedule "C" is utilized.

RECOMMENDATION

The Massachusetts economy continue to grow, as more jobs are created and the level of unemployment declines. Trust fund reserves, expected to exceed \$800 million by the end of 1996, will be \$300 million more than at the end of 1995. The 1997 economic assumptions include a continued low level of unemployment, solid wage growth and moderate job increases. Trust fund reserves and the economic outlook allow for the consideration of a schedule lower than that required in current law. Schedule "C" is two schedules lower than the automatically triggered schedule "E". This would be consistent with the practice of the last four years of enacting a rate schedule two schedules below the statutory requirement. Contributions under schedule "C" are estimated to be \$179 million less than schedule "E", reducing the average cost per employee by \$58 and generating an account balance of \$973 million by the end of 1997.

DET recommends the enactment of schedule "C" for employer contributions on 1997 wages. Tables 1A and 2A show the impact of schedule "C" on the private contributory trust fund account.

1. The first part of the paper discusses the importance of understanding the underlying mechanisms of the observed phenomena. This involves a thorough review of the existing literature and a clear identification of the research gaps.

2. The second part of the paper presents the theoretical framework and the hypotheses. This section is crucial for establishing the logical basis of the study and for guiding the empirical investigation.

3. The third part of the paper describes the research methodology, including the data sources, the sample characteristics, and the statistical techniques used for data analysis.

4. The fourth part of the paper reports the empirical results and discusses their implications. This section provides a detailed analysis of the data and highlights the key findings of the study.

5. The fifth part of the paper concludes the study and offers suggestions for future research. This section summarizes the main contributions of the paper and identifies areas for further exploration.

6. The final part of the paper is a list of references, which provides a comprehensive overview of the scholarly work related to the study.

7. The first part of the paper discusses the importance of understanding the underlying mechanisms of the observed phenomena. This involves a thorough review of the existing literature and a clear identification of the research gaps.

8. The second part of the paper presents the theoretical framework and the hypotheses. This section is crucial for establishing the logical basis of the study and for guiding the empirical investigation.

9. The third part of the paper describes the research methodology, including the data sources, the sample characteristics, and the statistical techniques used for data analysis.

10. The fourth part of the paper reports the empirical results and discusses their implications. This section provides a detailed analysis of the data and highlights the key findings of the study.

11. The fifth part of the paper concludes the study and offers suggestions for future research. This section summarizes the main contributions of the paper and identifies areas for further exploration.

12. The final part of the paper is a list of references, which provides a comprehensive overview of the scholarly work related to the study.

Table 1

Massachusetts Benefit Financing Simulation

Net Effect of Triggered Schedule "E"

Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE JAN 1	\$122	\$469	\$788	\$1,158	\$1,404	\$1,541
INCOME	\$1,060	\$1,037	\$1,107	\$975	\$852	\$832
TRUST FUND INTEREST	\$16	\$48	\$81	\$110	\$129	\$140
OUTLAYS	\$729	\$766	\$817	\$840	\$843	\$853
BALANCE, DEC 31	\$469	\$788	\$1,158	\$1,404	\$1,541	\$1,661
SCHEDULE	D	D	E	D	C	C
AVERAGE COST/EMPLOYEE	\$473	\$468	\$498	\$437	\$379	\$367

Figures may not add because of rounding.

Table 2

Economic Assumptions

Economic Assumptions Based on DRI Forecasts and Massachusetts

Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1995	\$72.2	\$24.6	2,860	4.3%	34.1%	1.27%	1.47%	5.4%	2.6%
1996	\$75.4	\$25.2	2,841	4.1%	33.4%	0.81%	1.38%	4.8%	2.6%
1997	\$78.6	\$25.4	2,857	4.4%	32.3%	0.95%	1.41%	4.6%	2.7%
1998	\$81.8	\$25.8	2,879	3.7%	31.5%	0.57%	1.19%	4.6%	2.7%
1999	\$85.5	\$26.2	2,904	3.2%	30.6%	0.59%	1.00%	4.4%	2.6%
2000	\$89.9	\$26.7	2,931	3.1%	29.7%	0.44%	0.93%	4.2%	2.5%

Figures may not add because of rounding.

1. Introduction

2. Methodology

3. Results

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Q1	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2
Q2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5
Q3	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8
Q4	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1

4. Discussion

5. Conclusion

6. References

7. Appendix

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Q1	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2
Q2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5
Q3	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8
Q4	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1

8. Acknowledgments

Table 1A

Massachusetts Benefit Financing Simulation

Net Effect of Proposed Schedule "C"

Private Contributory Trust Fund Account (All \$ in Millions)

	1995	1996	1997	1998	1999	2000
BALANCE JAN 1	\$122	\$469	\$788	\$973	\$1,303	\$1,554
INCOME	\$1,060	\$1,037	\$928	\$1,074	\$970	\$840
TRUST FUND INTEREST	\$16	\$48	\$75	\$96	\$124	\$142
OUTLAYS	\$729	\$766	\$817	\$840	\$843	\$853
BALANCE, DEC 31	\$469	\$788	\$973	\$1,303	\$1,554	\$1,683
SCHEDULE	D	D	C	E	D	C
AVERAGE COST/EMPLOYEE	\$473	\$468	\$418	\$481	\$431	\$371

Figures may not add because of rounding.

Table 2A

Economic Assumptions

Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contri- butory Payroll (billions)	Covered Employment (thousands)	Effective Contri- butory Rate	Contri- butory Wage Proportion	Solvency Assess- ment	Employer Contributions a % of Total Payroll	Total Unemploy- ment Rate	Insured Unemploy- ment Rate
1995	\$72.2	\$24.6	2,860	4.3%	34.1%	1.27%	1.47%	5.4%	2.6%
1996	\$75.4	\$25.2	2,841	4.1%	33.4%	0.81%	1.38%	4.8%	2.6%
1997	\$78.6	\$25.4	2,857	3.6%	32.3%	0.96%	1.18%	4.6%	2.7%
1998	\$81.8	\$25.8	2,879	4.2%	31.5%	0.63%	1.31%	4.6%	2.7%
1999	\$85.5	\$26.2	2,904	3.6%	30.6%	0.62%	1.13%	4.4%	2.6%
2000	\$89.9	\$26.7	2,931	3.1%	29.7%	0.44%	0.93%	4.2%	2.5%

Figures may not add because of rounding.

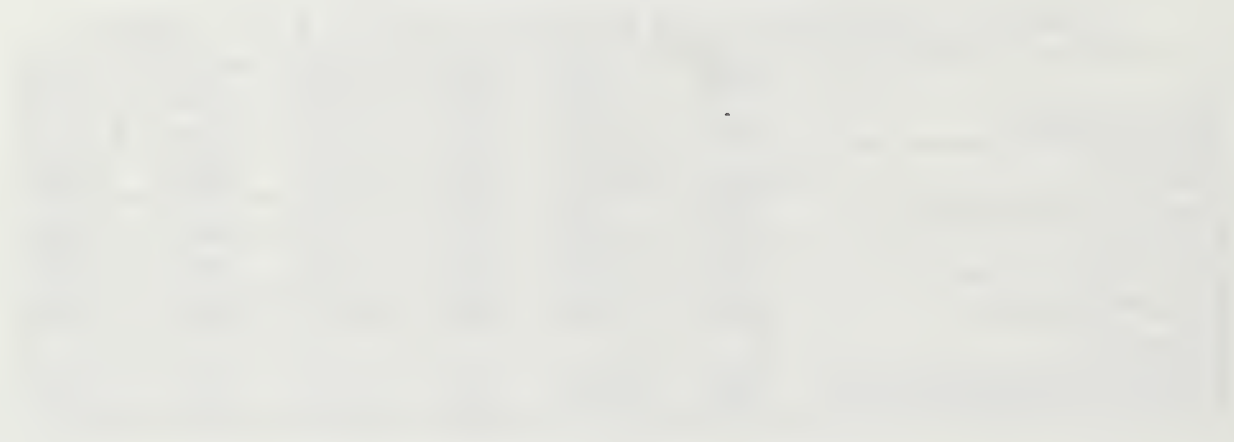
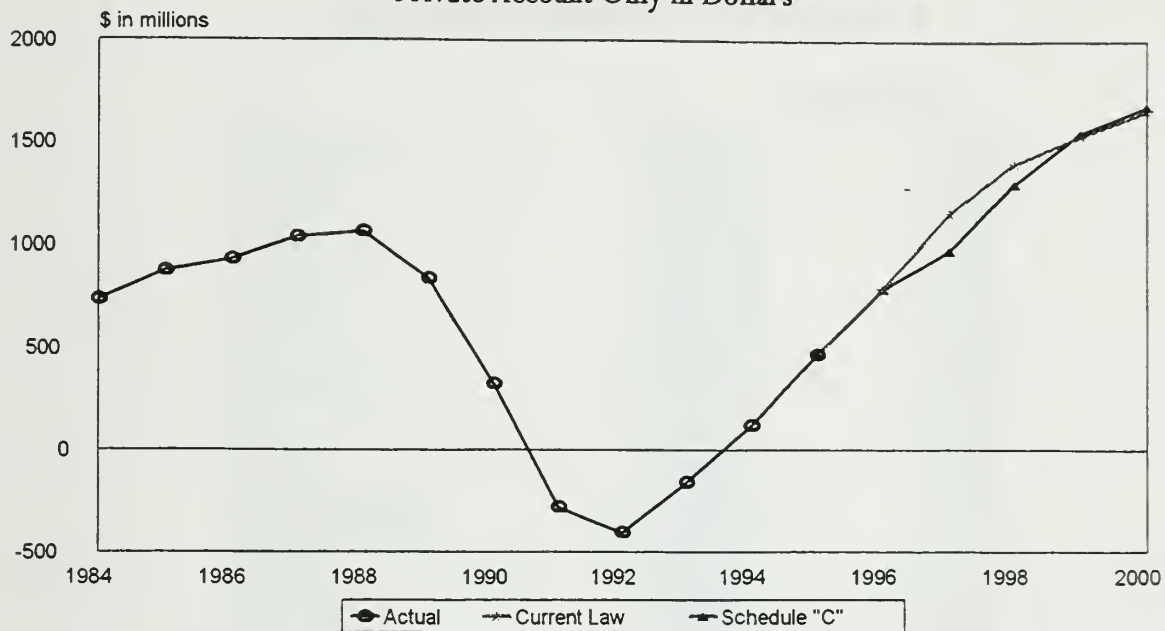


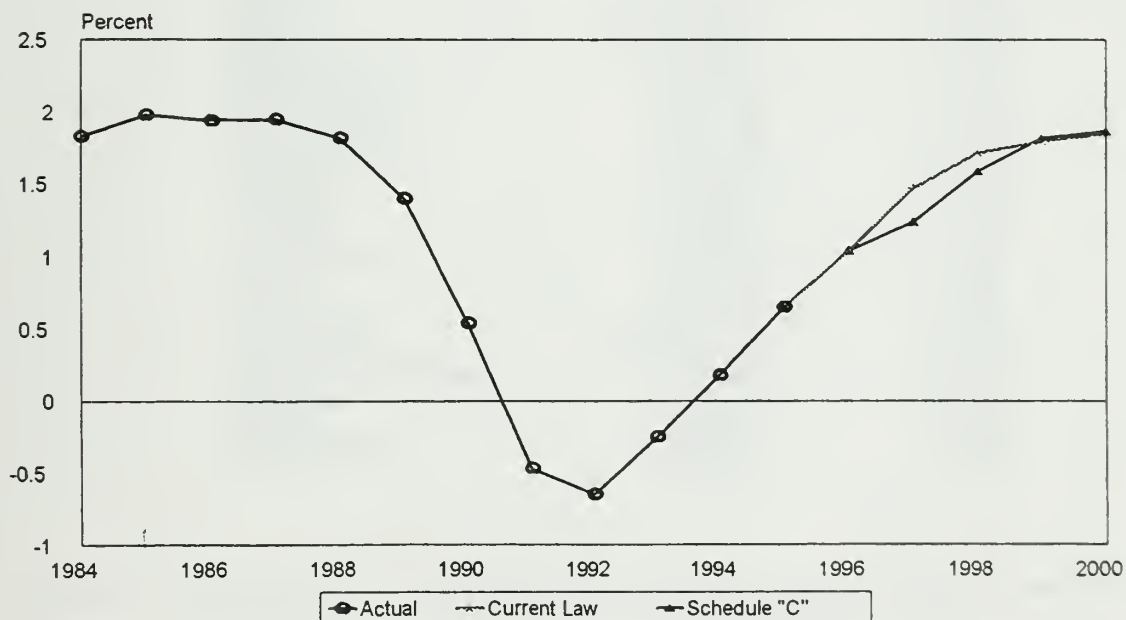
TABLE 1		SUMMARY OF DATA	
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25	26	27	28
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97	98	99	100

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Only in Dollars



Private Account Balance as a % of Total Wages



SOLVENCY OF STATE TRUST FUNDS

DECEMBER 31, 1995 TRUST FUND BALANCE

STATE	BALANCE	AS A PERCENT OF TOTAL WAGES
VIRGIN ISLANDS	\$39,400,084	6.75%
PUERTO RICO	\$624,481,626	6.61%
VERMONT	\$203,239,966	4.43%
WYOMING	\$139,916,016	4.15%
ALASKA	\$197,588,065	3.50%
NEW MEXICO	\$349,048,046	3.19%
DELAWARE	\$267,207,183	3.19%
OREGON	\$891,491,549	3.16%
MISSISSIPPI	\$542,004,481	3.13%
LOUISIANA	\$986,616,421	3.09%
IOWA	\$712,945,000	3.05%
WISCONSIN	\$1,478,275,612	3.01%
WASHINGTON	\$1,393,014,586	2.88%
UTAH	\$460,246,183	2.88%
IDAHO	\$240,467,931	2.84%
KANSAS	\$692,047,000	2.83%
OKLAHOMA	\$512,926,223	2.28%
NORTH CAROLINA	\$1,505,245,651	2.24%
NEW HAMPSHIRE	\$246,697,747	2.21%
INDIANA	\$1,207,425,390	2.12%
HAWAII	\$209,803,052	2.04%
NEW JERSEY	\$1,954,657,696	2.03%
MONTANA	\$118,106,735	2.01%
GEORGIA	\$1,428,698,594	2.00%
SOUTH CAROLINA	\$547,671,333	1.81%
PENNSYLVANIA	\$1,881,216,659	1.75%
NEVADA	\$292,843,137	1.66%
TENNESSEE	\$808,893,895	1.63%
KENTUCKY	\$462,808,518	1.58%
ALABAMA	\$525,314,733	1.58%
FLORIDA	\$1,775,933,954	1.50%
ARIZONA	\$525,663,596	1.46%
OHIO	\$1,573,532,574	1.44%
MICHIGAN	\$1,472,352,138	1.43%
NEBRASKA	\$190,999,804	1.42%
WEST VIRGINIA	\$161,154,179	1.41%
NORTH DAKOTA	\$56,443,633	1.39%
MARYLAND	\$595,126,572	1.34%
RHODE ISLAND	\$108,178,805	1.31%
VIRGINIA	\$775,498,026	1.25%
COLORADO	\$472,498,421	1.20%
ILLINOIS	\$1,601,306,369	1.20%
ARKANSAS	\$197,336,993	1.10%
SOUTH DAKOTA	\$50,748,182	1.07%
MAINE	\$93,639,745	1.04%
MINNESOTA	\$451,904,591	0.92%
CALIFORNIA	\$2,066,572,531	0.67%
MASSACHUSETTS	\$469,263,562	0.65%
DISTRICT OF COLUMBIA	\$67,226,785	0.55%
MISSOURI	\$193,129,239	0.39%
TEXAS	\$574,084,232	0.33%
CONNECTICUT	\$114,849,121	0.26%
NEW YORK	\$249,562,666	0.12%

SOURCE: U.S. DEPARTMENT OF LABOR, EMPLOYMENT AND TRAINING ADMIN., DIVISION OF ACTUARIAL SERVICES

10/16/96

DRAFT LEGISLATION TO SET 1997
CONTRIBUTION RATES AT SCHEDULE "C"

Whereas, the deferred operation of this act would tend to defeat its purpose, which is to stimulate job growth by lowering unemployment insurance costs, therefore it is hereby declared to be a emergency law, necessary to the immediate preservation of the public convenience.

SECTION 1. Notwithstanding the provisions of section fourteen of chapter one hundred and fifty one A of the General Laws, the experience rate of an employer qualifying therefor under subsection (b) of section fourteen of said chapter shall be the rate which appears in the column designated "C" for calendar year nineteen hundred and ninety-seven.



MAY 14 1997

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QUARTERLY TRUST FUND REPORT

DET RESEARCH

JANUARY 1997

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of December 1996, the Massachusetts Unemployment Insurance Trust Fund balance was \$890 million, with the private contributory account having a balance of \$839 million and the governmental contributory account holding a \$51 million balance.

1996 REVIEW

The Massachusetts economy continued to improve throughout 1996, with the unemployment rate dropping from 5.1 percent in January to 3.9 percent in November. This decline in unemployment resulted in benefit payments of \$717 million for calendar year 1996, down from the \$729 million paid to claimants in 1995 and \$49 million lower than was forecast in the October report. The average weekly benefit amount for total unemployment was \$254.33 in Massachusetts for the second quarter of 1996, 34 percent higher than the U.S. average of \$189.83. This level of payments during 1996, combined with \$1,047 million in private contributions, left a private contributory account balance of \$839 million, an increase of \$51 million over the previous October simulation. This account balance exceeded the annual benefit outlays for the first time in the 1990s.

E Division of
Employment
and Training

This report is prepared by the Economic Research Office of the Massachusetts Division of Employment and Training. Any questions can be directed to DET at (617) 626-6556.

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in November 1996.

The assumptions from the DRI forecast are arrayed below and compared to the economic assumptions used in the August 1996 and October 1996 trust fund reports.

	WAGE & SALARY GROWTH (%)			TOTAL UNEMPLOYMENT RATE (%)		
	8/96	10/96	1/97	8/96	10/96	1/97
1997	4.2	3.9	4.6	4.9	4.6	4.2
1998	4.2	3.5	4.1	4.8	4.6	4.3
1999	4.7	3.8	4.1	4.5	4.4	4.3
2000	4.7	4.3	4.2	4.4	4.2	4.2
2001	N/A	N/A	4.1	N/A	N/A	4.3

	LABOR FORCE		
	8/96	10/96	1/97
1997	3,210,800	3,212,300	3,199,700
1998	3,231,700	3,235,500	3,224,600
1999	3,259,300	3,261,900	3,249,700
2000	3,291,100	3,290,200	3,273,500
2001	N/A	N/A	3,298,000

The current economic scenario is much more favorable as compared to the October 1996 scenario in several ways. The labor force would continue to grow in a pattern similar to the October forecast. The January forecast shows the labor force at about 3,200,000 for 1997 and projects an increase of approximately 25,000 for each subsequent year. The October forecast showed a slightly higher level for 1997 and showed a little more growth in 2000. Wage and salary disbursements in the early part of the forecast are expected to grow faster than was forecast in October, with the growth rates expected to be 0.7 percentage point higher in 1997, 0.6 percentage point higher in 1998, 0.3 percentage point higher in 1999 and 0.1 percentage point lower in 2000. The forecast shows a growth rate of 4.6% in 1997 and then a

consistent rate of around 4.1 percent through 2001. The total unemployment rate is expected to remain steady throughout the duration of the forecast: 4.2% in 1997 and 2000 and 4.3% in 1998, 1999 and 2001. The 1997 and 1998 rates are respectively 0.4 percentage point and 0.3 percentage point lower than was forecast in October. The 1999 and 2000 rates are similar to the October forecast.

Table 1 contains data concerning the annual activity in the private contributory account under current law. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1997 OUTLOOK

Trust fund reserves as of September 30, 1996 had grown to a level sufficient to automatically trigger Schedule E for employer contributions for wages paid during 1997. Employer contributions on Schedule E would generate \$1.144 billion for 1997, with an average contributory rate of 4.6 percent. The 1997 employer contributions will be 1.46 percent of total payroll and \$97 million higher than 1996. Based on a forecasted unemployment rate of 4.2 percent for 1997, benefit payments are estimated by the simulation model to be \$789 million, \$72 million more than the previous year. Under this scenario, the private contributory account would end 1997 with a balance of \$1.275 billion, \$436 million more than the end of 1996.

Notes:

- 1) It has been the experience of the DET Research Office that the simulation model overstates benefit payments and weeks compensated when the levels of total and insured unemployment fall below the economic assumptions. DET expects unemployment to be slightly less than the model is showing for 1997.
- 2) Employer contributions will be revised later this year to reflect the actual contribution rates issued for all employers for 1997. Individual employer rates are computed as part of the annual experience rating process. The revised average contributory rate and the cost per employee are expected to be less than the simulation is showing.

1998 - 2001 FORECAST

The simulation estimates that trust fund reserves will trigger Schedule D for employer contributions for 1998, generating \$1.037 billion, or \$107 million less than Schedule E produces in 1997. Benefit payments are expected to be \$816 million. The estimated trust fund balance for the end of 1998 is \$1,624 billion or 2.0 percent of total payroll. The simulation has Schedule C triggering for employer contributions for 1999 and Schedule B for 2000 and 2001. Income to the trust fund in the form of employer contributions, plus interest earnings, will exceed benefit payments through 2000. Benefit payments increase over the forecast period, reflecting the economic assumptions of flat insured unemployment and gradual wage growth. The simulation shows trust fund reserves stabilizing at two percent of total payroll for the forecast period. Trust fund reserves will be \$1.860 billion by the end of calendar year 2001.

current law and \$251 million more than at the end of 1996. If rates are set under Schedule C in 1997, Schedule D will likely trigger for 1998 contributions and Schedule C for 1999 through 2001. The trust fund reserves at the end of 2001 are projected to be \$1.900 billion, \$40 million more than the current law scenario. Tables 1A and 2A show the projected impact of using Schedule C for 1997 on the private contributory account over the 1997-2001 period.

**1997 Rate Schedule:
Recommendation**

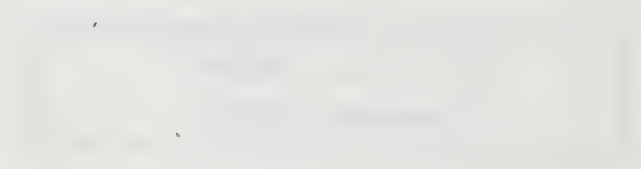
During 1996, total and insured unemployment were less than the forecasts used in the quarterly reports. Therefore, trust fund reserves at the end of 1996 were \$370 million more than the previous year. The current outlook for the Massachusetts economy for 1997 is a continuing low level of unemployment and moderate job growth.

DET recommends the Massachusetts legislature give immediate consideration to legislation providing for private contributory account employer contributions for 1997 wages on Schedule C. Schedule C will generate \$965 million in employer contributions, \$179 million less than Schedule E and \$176 million more than projected benefit payments. Trust fund reserves are estimated to be \$1.090 billion by the end of 1997, \$185 million less than projected under

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for ensuring the integrity of the financial data and for facilitating the audit process. The document also outlines the specific requirements for record-keeping, including the need to maintain separate records for each account and to ensure that all transactions are properly documented and dated.

The second part of the document provides a detailed overview of the accounting system used by the organization. It describes the various components of the system, including the general ledger, the subsidiary ledgers, and the control accounts. It also explains how the system is used to process transactions and to generate financial statements. The document highlights the strengths of the system, such as its ability to provide timely and accurate information, and also identifies areas for improvement.

The third part of the document discusses the role of the accounting department in the overall management of the organization. It explains how the department provides valuable information to management for decision-making purposes and how it helps to ensure the efficient operation of the organization. The document also outlines the responsibilities of the accounting department and the qualifications required for its staff.



The fourth part of the document discusses the future plans for the accounting system. It outlines the proposed improvements to the system, including the implementation of new software and the hiring of additional staff. The document also discusses the potential benefits of these changes, such as increased efficiency and improved accuracy. Finally, the document provides a summary of the key findings and recommendations.

Table 1

Massachusetts Benefit Financing Simulation

Net Effect of Triggered Schedule "E"

Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,275	\$1,624	\$1,812	\$1,865
INCOME	\$1,047	\$1,144	\$1,037	\$884	\$755	\$741
TRUST FUND INTEREST	\$40	\$81	\$128	\$154	\$166	\$169
OUTLAYS	\$717	\$789	\$816	\$850	\$868	\$915
BALANCE, DEC 31	\$839	\$1,275	\$1,624	\$1,812	\$1,865	\$1,860
SCHEDULE	D	E	D	C	B	B
AVERAGE COST/EMPLOYEE	\$471	\$517	\$466	\$395	\$335	\$327

Figures may not add because of rounding.

Table 2

Economic Assumptions Based on DRI Forecasts and Massachusetts

Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$75.5	\$25.3	2,867	4.1%	33.5%	0.81%	1.39%	4.6%	2.6%
1997	\$78.6	\$25.4	2,849	4.6%	32.3%	0.64%	1.46%	4.2%	2.5%
1998	\$82.3	\$25.8	2,871	4.0%	31.3%	0.51%	1.26%	4.3%	2.6%
1999	\$86.1	\$26.2	2,893	3.3%	30.4%	0.39%	1.03%	4.3%	2.6%
2000	\$90.2	\$26.6	2,915	2.8%	29.5%	0.35%	0.84%	4.2%	2.6%
2001	\$94.4	\$27.1	2,935	2.7%	28.7%	0.37%	0.78%	4.3%	2.6%

Figures may not add because of rounding.

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NAME	LAST	FIRST	MIDDLE	INITIALS	DATE
1	ALLEN	JOHN	EDWARD	J. E.	1955
2	BROWN	MARY	ELIZABETH	M. E.	1956
3	CHAMBERLAIN	WILLIAM	FRANKLIN	W. F.	1957
4	DICKSON	CHARLES	ROBERT	C. R.	1958
5	EVANS	DAVID	LEWIS	D. L.	1959
6	FERGUSON	ELIZABETH	MARY	E. M.	1960
7	GILBERT	FRANK	JOHN	F. J.	1961
8	HARRIS	GEORGE	WILLIAM	G. W.	1962
9	JACKSON	HENRY	EDWARD	H. E.	1963
10	KELLY	IRVING	DAVID	I. D.	1964
11	LEWIS	JAMES	ALFRED	J. A.	1965
12	MARTIN	KATHLEEN	JOAN	K. J.	1966
13	NICHOLS	LAWRENCE	JOHN	L. J.	1967
14	OLSON	MARGARET	ELIZABETH	M. E.	1968
15	PETERSON	ROBERT	CHARLES	R. C.	1969
16	QUINN	SARAH	MARY	S. M.	1970
17	ROBERTS	THOMAS	WILLIAM	T. W.	1971
18	SCOTT	VERNON	JOHN	V. J.	1972
19	TAYLOR	WILLIAM	FRANKLIN	W. F.	1973
20	WALKER	XAVIER	JOHN	X. J.	1974
21	YOUNG	ZACHARY	DAVID	Z. D.	1975

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NAME	LAST	FIRST	MIDDLE	INITIALS	DATE
22	ADAMS	JOHN	EDWARD	J. E.	1976
23	BROWN	MARY	ELIZABETH	M. E.	1977
24	CHAMBERLAIN	WILLIAM	FRANKLIN	W. F.	1978
25	DICKSON	CHARLES	ROBERT	C. R.	1979
26	EVANS	DAVID	LEWIS	D. L.	1980
27	FERGUSON	ELIZABETH	MARY	E. M.	1981
28	GILBERT	FRANK	JOHN	F. J.	1982
29	HARRIS	GEORGE	WILLIAM	G. W.	1983
30	JACKSON	HENRY	EDWARD	H. E.	1984
31	KELLY	IRVING	DAVID	I. D.	1985
32	LEWIS	JAMES	ALFRED	J. A.	1986
33	MARTIN	KATHLEEN	JOAN	K. J.	1987
34	NICHOLS	LAWRENCE	JOHN	L. J.	1988
35	OLSON	MARGARET	ELIZABETH	M. E.	1989
36	PETERSON	ROBERT	CHARLES	R. C.	1990
37	QUINN	SARAH	MARY	S. M.	1991
38	ROBERTS	THOMAS	WILLIAM	T. W.	1992
39	SCOTT	VERNON	JOHN	V. J.	1993
40	TAYLOR	WILLIAM	FRANKLIN	W. F.	1994
41	WALKER	XAVIER	JOHN	X. J.	1995
42	YOUNG	ZACHARY	DAVID	Z. D.	1996

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Table 1A

Massachusetts Benefit Financing Simulation

Net Effect of Proposed Schedule "C"

Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,090	\$1,430	\$1,630	\$1,791
INCOME	\$1,047	\$965	\$1,045	\$913	\$875	\$857
TRUST FUND INTEREST	\$40	\$75	\$111	\$137	\$154	\$167
OUTLAYS	\$717	\$789	\$816	\$850	\$868	\$915
BALANCE, DEC 31	\$839	\$1,090	\$1,430	\$1,630	\$1,791	\$1,900
SCHEDULE	D	C	D	C	C	C
AVERAGE COST/EMPLOYEE	\$471	\$436	\$469	\$408	\$389	\$379

Figures may not add because of rounding.

Table 2A

Economic Assumptions Based on DRI Forecasts and Massachusetts**Benefit Financing Simulation Output:**

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$75.5	\$25.3	2,867	4.1%	33.5%	0.81%	1.39%	4.6%	2.6%
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1998	\$82.3	\$25.8	2,871	4.1%	31.3%	0.58%	1.27%	4.3%	2.6%
1999	\$86.1	\$26.2	2,893	3.4%	30.4%	0.45%	1.06%	4.3%	2.6%
2000	\$90.2	\$26.6	2,915	3.3%	29.5%	0.41%	0.97%	4.2%	2.6%
2001	\$94.4	\$27.1	2,935	3.2%	28.7%	0.39%	0.91%	4.3%	2.6%

Figures may not add because of rounding.

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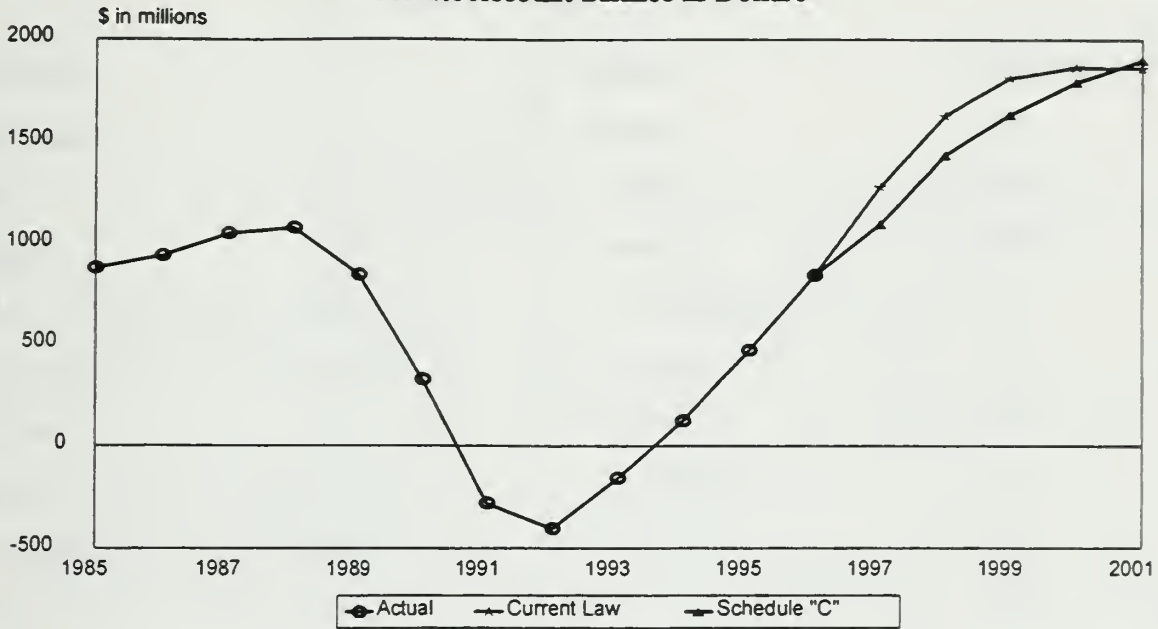
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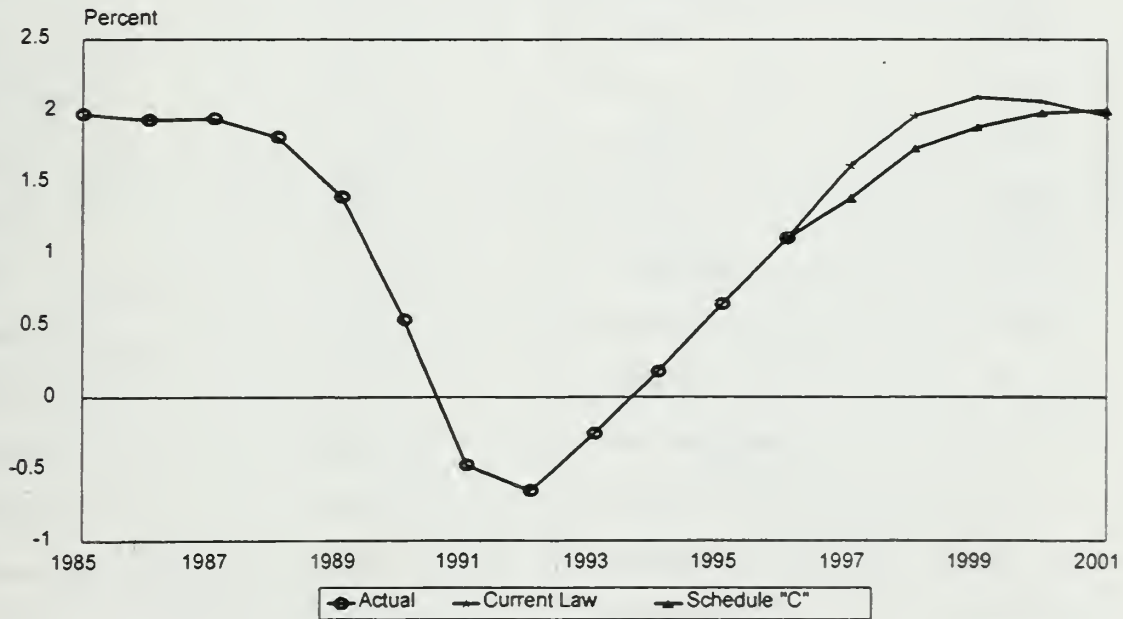
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UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Balance in Dollars



Private Account Balance as a Percent of Massachusetts Total Wages





UNEMPLOYMENT INSURANCE AS A COST OF DOING BUSINESS:
STATES RANKED BY COST PER EMPLOYEE
(Average, Second Quarter 1996)

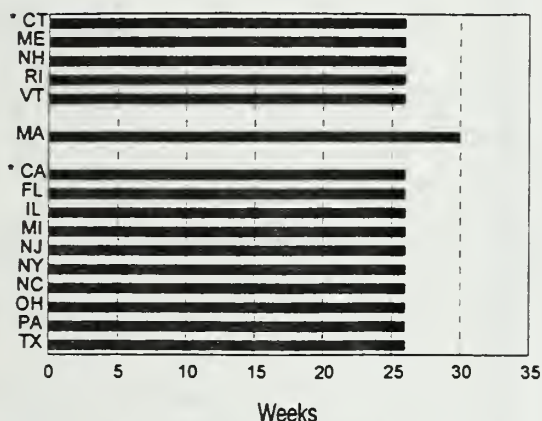
Rhode Island	\$549	Montana	\$190 (Median)
Massachusetts	\$471	Missouri	\$170
Alaska	\$467	Louisiana	\$165
Michigan	\$427	Kentucky	\$163
Hawaii	\$426	South Carolina	\$162
Connecticut	\$420*	Wyoming	\$154
New Jersey	\$413	Tennessee	\$148
New York	\$349	North Dakota	\$139
Pennsylvania	\$332	Texas	\$133
Oregon	\$332	Iowa	\$132
Washington	\$325	Georgia	\$130
California	\$305	Florida	\$122
Maine	\$272	Oklahoma	\$120
Idaho	\$270	Arizona	\$119
West Virginia	\$254	Utah	\$116
Nevada	\$249	Colorado	\$110
Illinois	\$240	Virginia	\$104
Ohio	\$240	Mississippi	\$104
Delaware	\$232	Indiana	\$102
Wisconsin	\$231	Alabama	\$95
Maryland	\$226	New Hampshire	\$79
Minnesota	\$221	Kansas	\$70
Arkansas	\$213	Nebraska	\$44
Vermont	\$210	South Dakota	\$39
New Mexico	\$195	North Carolina	\$35

* Does not include bond excise @ \$123 per employee.

Computed by DET based on U.S. Dept. of Labor UIS Division of Actuarial Services, 2nd Quarter CY'96 UI Data Summary.

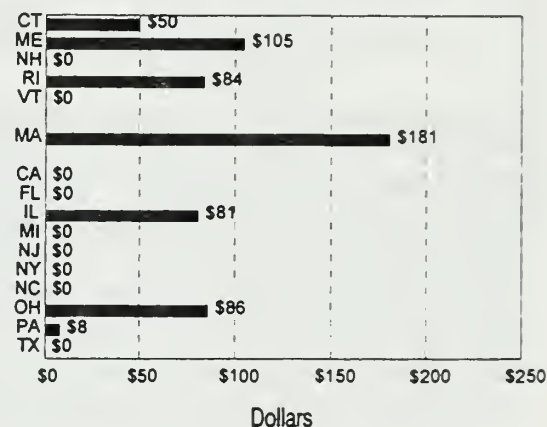
BENEFITS IN COMPARATIVE STATES

MAXIMUM POTENTIAL DURATION OF BENEFITS



* Benefits extended when unemployment reaches a certain level
DET Research 12/96

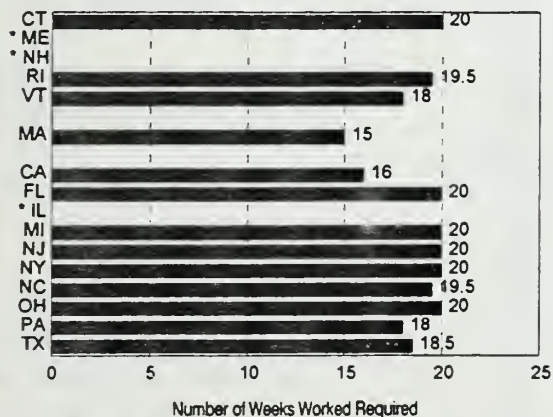
MAXIMUM WEEKLY DEPENDENTS ALLOWANCE



DET Research 12/96

LABOR FORCE ATTACHMENT

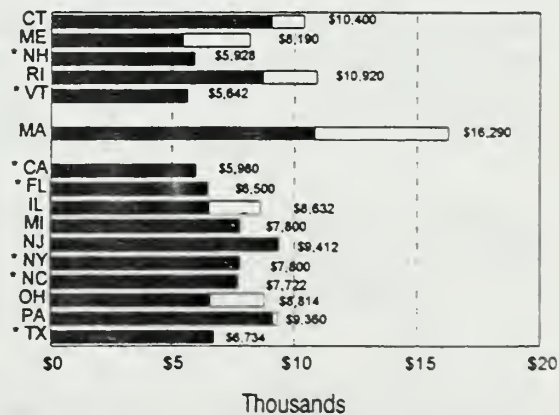
Qualifying Requirements



* No minimum weeks required, but earnings in at least two quarters
DET Research 12/96

MAXIMUM POTENTIAL BENEFITS

With and Without Dependents Allowance



* Dependency allowance not offered

DET Research 12/96

Estimating Parameters in a Logistic Model

Abstract. This paper discusses the estimation of parameters in a logistic model. The model is assumed to be correctly specified, and the parameters are estimated by maximum likelihood. The asymptotic properties of the maximum likelihood estimator are discussed, and it is shown that the estimator is efficient. The paper also discusses the use of the maximum likelihood estimator in hypothesis testing and confidence interval estimation.

Keywords: Logistic model, maximum likelihood estimation, asymptotic properties, hypothesis testing, confidence interval estimation.

1. Introduction. The logistic model is a widely used model in statistics. It is used to model the probability of a binary outcome, such as success or failure, based on a set of predictor variables. The model is assumed to be correctly specified, and the parameters are estimated by maximum likelihood. The asymptotic properties of the maximum likelihood estimator are discussed, and it is shown that the estimator is efficient. The paper also discusses the use of the maximum likelihood estimator in hypothesis testing and confidence interval estimation.

2. The Logistic Model. The logistic model is a binary response model. It is used to model the probability of a binary outcome, such as success or failure, based on a set of predictor variables. The model is assumed to be correctly specified, and the parameters are estimated by maximum likelihood. The asymptotic properties of the maximum likelihood estimator are discussed, and it is shown that the estimator is efficient. The paper also discusses the use of the maximum likelihood estimator in hypothesis testing and confidence interval estimation.

AUG 21 1997

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QUARTERLY TRUST FUND REPORT

DET RESEARCH

APRIL 1997

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of March 1997, the Massachusetts Unemployment Insurance Trust Fund balance was \$794 million, with the private contributory account having a balance of \$742 million, and the governmental contributory account holding a \$52 million balance.

1997 TO DATE

Actual activity for the first quarter of 1997 is consistent with the estimates created by the benefit financing simulation. Based on actual activity through the end of March 1997, the estimated benefit payments from the private contributory trust fund account will be approximately \$223 million compared to the simulation estimate of \$226 million. The average weeks claimed for the first quarter are estimated by DET to be 83,700 compared to the 84,400 estimated by the benefit financing simulation.

Contributions received for the private contributory account in the first quarter were \$115 million compared to the estimate of \$108 million.

E Division of
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and Training

This report is prepared by the Economic Research Office of the Massachusetts Division of Employment and Training. Any questions can be directed to DET at (617) 626-6556

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ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in February 1997.

The assumptions from the DRI forecast are arrayed below and compared to the economic assumptions used in the October 1996 and January 1997 trust fund reports.

	WAGE & SALARY GROWTH%			TOTAL UNEMPLOYMENT RATE%		
	10/96	1/97	4/97	10/96	1/97	4/97
1997	3.9	4.6	6.8	4.6	4.2	3.9
1998	3.5	4.1	4.4	4.6	4.3	3.9
1999	3.8	4.1	4.1	4.4	4.3	4.0
2000	4.3	4.2	4.2	4.2	4.2	3.9
2001	N/A	4.1	4.1	N/A	4.3	4.1

	LABOR FORCE		
	10/96	1/97	4/97
1997	3,212,300	3,199,700	3,129,500
1998	3,235,500	3,224,600	3,243,500
1999	3,261,900	3,249,700	3,267,400
2000	3,290,200	3,273,500	3,288,500
2001	N/A	3,298,000	3,309,700

The current economic scenario is more favorable as compared to the January 1997 scenario in several ways. The labor force would continue to grow in a pattern similar to the January forecast but at a higher actual level for all the years of the forecast range. The April forecast shows the labor force at about 3,220,000 for 1997 and projects an average increase of approximately 23,000 for the four subsequent years. The January forecast showed a 1997 labor force of about 3,200,000 and projected a slightly higher average growth of about 25,000.

Wage and salary disbursements in 1997 are expected to grow much faster than was forecast in October, 6.8 percent versus 4.6 percent, but only slightly higher in 1998, 4.4 percent versus 4.1 percent. The current and prior forecasts show identical growth rates of around 4.1 percent for the years 1999, 2000 and 2001.

The total unemployment rate is expected to remain fairly steady throughout the duration of the forecast: 3.9 percent in 1997, 1998 and 2000, 4.0 percent in 1999 and 4.1 percent in 2001. The April forecast for each of the five years, ranged from 0.2 percentage point to 0.4 percentage point lower than was forecast in January.

Table 1 contains data concerning the annual activity in the private contributory account under current law. Table 2 details the economic assumptions used in this Massachusetts Benefit Financing Simulation.

1997 OUTLOOK

The simulation estimates indicate continued weeks claimed will be slightly less than last year's level for the rest of the year. The outlays are projected to be \$711 million for the private contributory account for 1997, six million dollars less than last year's outlays of \$717 million.

Employer contributions on Schedule E for 1997 will generate \$1.138 billion in income, \$91 million more than 1996 contributions of \$1.047 billion. The 4.3% average contributory rate for 1997 is 0.3 lower than the January model estimate of 4.6%. This average contributory rate reflects the actual 1996 experience of employers used in the calculations for determining 1997 contribution rates. These new data contrast with the contributory rate estimates contained in the January Trust Fund Report which were based on the 1995 experience projected for 1997. The cost per employee is estimated at \$503 for 1997 on Schedule E compared to \$465 for 1996 on Schedule D.

During 1996, income was \$330 million more than outlays. For 1997, income is projected to be \$427 million more than outlays. The \$83 million in interest earned on the account balance will increase the private contributory account reserves to \$1.349 billion by the end of this year, \$510 million more than last year's end. The trust fund account reserves would be 1.66% of total payroll by the end of 1997.

1. The first part of the report discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for the company's financial health and for providing reliable information to stakeholders.

2. The second part of the report details the various methods used to collect and analyze data. It includes a description of the sampling process and the statistical techniques employed to interpret the results.

3. The third part of the report presents the findings of the study. It includes a series of tables and graphs that illustrate the data trends and patterns. The findings suggest that there is a significant correlation between the variables studied.

4. The fourth part of the report discusses the implications of the findings for the company's operations. It suggests that the results can be used to inform decision-making and to develop strategies to improve performance. It also highlights the need for further research in this area.

5. The final part of the report provides a conclusion and a summary of the key points. It reiterates the importance of the study and the need for continued monitoring and evaluation. It also includes a list of references and a bibliography.

6. The sixth part of the report discusses the limitations of the study. It acknowledges that there are several factors that could have influenced the results and that the study may not be generalizable to all situations. It also suggests ways to address these limitations in future research.

7. The seventh part of the report provides a detailed description of the data collection process. It includes information about the sources of the data, the methods used to collect it, and the steps taken to ensure its accuracy and reliability.

8. The eighth part of the report presents a detailed analysis of the data. It includes a series of tables and graphs that show the results of the statistical tests and the interpretation of these results. It also discusses the potential reasons for the observed trends and patterns.

9. The ninth part of the report discusses the practical applications of the findings. It suggests that the results can be used to develop policies and procedures that will improve the company's efficiency and effectiveness. It also highlights the need for ongoing communication and collaboration between different departments.

10. The final part of the report provides a final summary and a list of recommendations. It reiterates the key findings and suggests specific actions that should be taken to address the issues identified. It also includes a list of references and a bibliography.

1998 - 2001 PROJECTIONS

The simulation estimates an increase in the trust fund account reserves during 1997 which will trigger Schedule C for employer contributions for 1998. Schedule C is estimated to reduce the average employer contribution rate to 3.2% for 1998. Schedule C is expected to be in effect through 2000 and trust fund account reserves are estimated to be sufficient to trigger Schedule B for employer contributions for 2001.

The continued strong economic outlook and total unemployment estimates averaging 4.0% for the period would result in the insured unemployment rate averaging 2.4% for the remainder of the five year outlook. Wage and salary growth will increase the average check amount and total benefit payments, resulting in gradual increases in outlays each year from 1998 through 2001. The trust fund balance is estimated at \$2.097 billion at the end of 2001, 2.14% of total payroll.

SCHEDULE C FOR 1997

DET recommends the enactment of House 2236, reducing employer contributions for 1997 to Schedule C from the current law requirement of Schedule E. This alternative approach to financing unemployment insurance benefits during 1997 would reduce employer contributions to \$951 million for 1997, \$187 million less than contributions on Schedule E. The estimated cost per employee would be \$420, \$83 less than Schedule E. This level of income plus interest earnings of \$77 million would provide trust fund reserves of \$1.156 billion by the end of the year. The trust fund account balance would be 1.42% of total payroll.

The simulation estimates employer contributions for 1998 would be on Schedule D, years 1999 and 2000 contributions on Schedule C and year 2001 on Schedule B. The trust fund account reserves would be an estimated \$2.018 billion at the end of 2001, 2.06% of total payroll.

The simulations for Schedule C are arrayed in Table 1A and the economic assumptions in Table 2A.

Summary of Data	
Year	1998
Month	January
Day	15
Time	10:00 AM
Location	Room 101
Subject	Mathematics
Teacher	Mr. Smith
Students	John, Mary, Peter, Susan, David
Activity	Group work on fractions
Duration	45 minutes
Materials	Textbook, worksheets, calculators
Assessment	Quiz on fractions
Results	John: 85%, Mary: 90%, Peter: 75%, Susan: 80%, David: 88%
Comments	All students showed improvement in understanding fractions.

The following table shows the results of the quiz on fractions. The students were given 10 questions to answer. The results are as follows:

Student	Correct Answers	Percentage
John	8	85%
Mary	9	90%
Peter	7	75%
Susan	8	80%
David	9	88%

Detailed Results	
Question	Answer
1. What is 1/2 of 10?	5
2. What is 3/4 of 12?	9
3. What is 1/3 of 15?	5
4. What is 2/5 of 20?	8
5. What is 1/4 of 24?	6
6. What is 3/8 of 24?	9
7. What is 1/2 of 18?	9
8. What is 2/3 of 18?	12
9. What is 1/5 of 25?	5
10. What is 3/5 of 25?	15

Table 1

Massachusetts Benefit Financing Simulation

Net Effect of Triggered Schedule "E"

Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,349	\$1,632	\$1,855	\$2,053
INCOME	\$1,047	\$1,138	\$905	\$863	\$843	\$727
TRUST FUND INTEREST	\$40	\$83	\$132	\$155	\$175	\$188
OUTLAYS	\$717	\$711	\$754	\$795	\$820	\$871
BALANCE, DEC 31	\$839	\$1,349	\$1,632	\$1,855	\$2,053	\$2,097
SCHEDULE	D	E	C	C	C	B
AVERAGE COST/EMPLOYEE	\$465	\$503	\$398	\$378	\$367	\$315

Figures may not add because of rounding.

Table 2

Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$75.8	\$25.4	2,881	4.1%	33.5%	0.88%	1.38%	4.3%	2.6%
1997	\$81.4	\$26.7	2,912	4.3%	32.8%	0.74%	1.40%	3.9%	2.3%
1998	\$85.4	\$27.1	2,932	3.2%	31.7%	0.51%	1.06%	3.9%	2.4%
1999	\$89.4	\$27.6	2,953	3.1%	30.9%	0.44%	0.97%	4.0%	2.4%
2000	\$93.6	\$28.0	2,972	3.0%	29.9%	0.37%	0.90%	3.9%	2.4%
2001	\$97.8	\$28.5	2,989	2.5%	29.1%	0.36%	0.74%	4.1%	2.5%

Figures may not add because of rounding.

3. Title: _____

4. Objective: _____

5. Materials: _____

6. Procedure	
Step 1	_____
Step 2	_____
Step 3	_____
Step 4	_____
Step 5	_____
Step 6	_____
Step 7	_____
Step 8	_____
Step 9	_____
Step 10	_____

7. Results: _____

8. Conclusion: _____

9. Discussion: _____

10. References	
1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____
10	_____

Table 1A

Massachusetts Benefit Financing Simulation
Net Effect of Proposed Schedule "C"

Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,156	\$1,529	\$1,770	\$1,972
INCOME	\$1,047	\$951	\$1,010	\$889	\$855	\$737
TRUST FUND INTEREST	\$40	\$77	\$117	\$147	\$167	\$180
OUTLAYS	\$717	\$711	\$754	\$795	\$820	\$871
BALANCE, DEC 31	\$839	\$1,156	\$1,529	\$1,770	\$1,972	\$2,018
SCHEDULE	D	C	D	C	C	B
AVERAGE COST/EMPLOYEE	\$465	\$420	\$444	\$389	\$372	\$320

Figures may not add because of rounding.

Table 2A

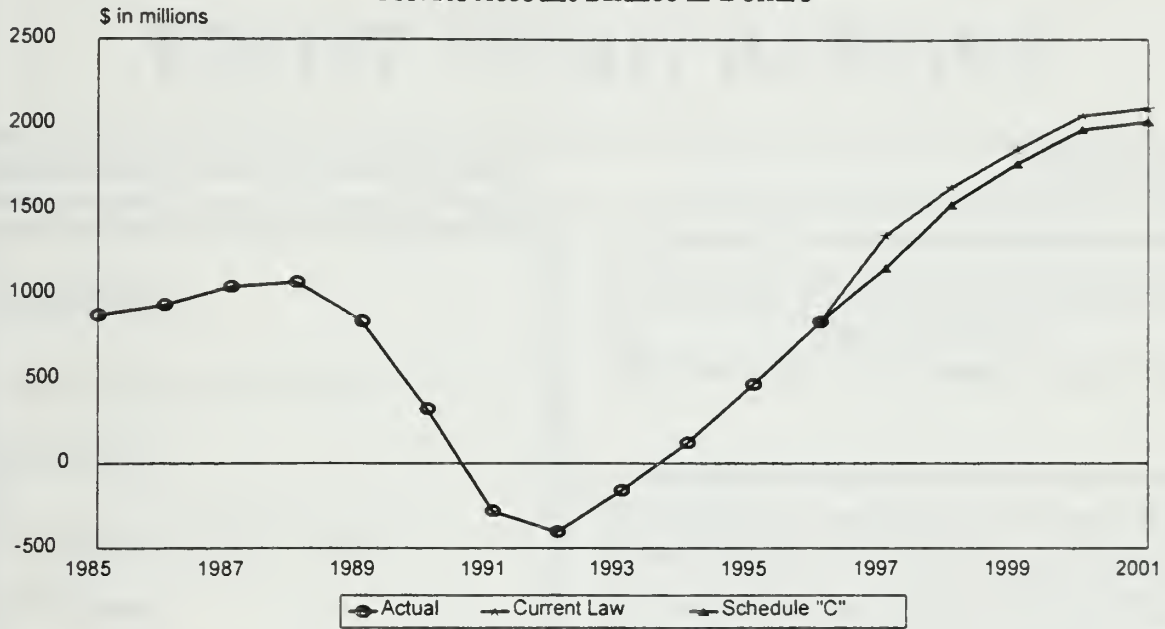
Economic Assumptions Based on DRI Forecasts and Massachusetts
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$75.8	\$25.4	2,881	4.1%	33.5%	0.88%	1.38%	4.3%	2.6%
1997	\$81.4	\$26.7	2,912	3.5%	32.8%	0.75%	1.17%	3.9%	2.3%
1998	\$85.4	\$27.1	2,932	3.8%	31.7%	0.57%	1.18%	3.9%	2.4%
1999	\$89.4	\$27.6	2,953	3.2%	30.9%	0.47%	0.99%	4.0%	2.4%
2000	\$93.6	\$28.0	2,972	3.0%	29.9%	0.40%	0.91%	3.9%	2.4%
2001	\$97.8	\$28.5	2,989	2.5%	29.1%	0.38%	0.75%	4.1%	2.5%

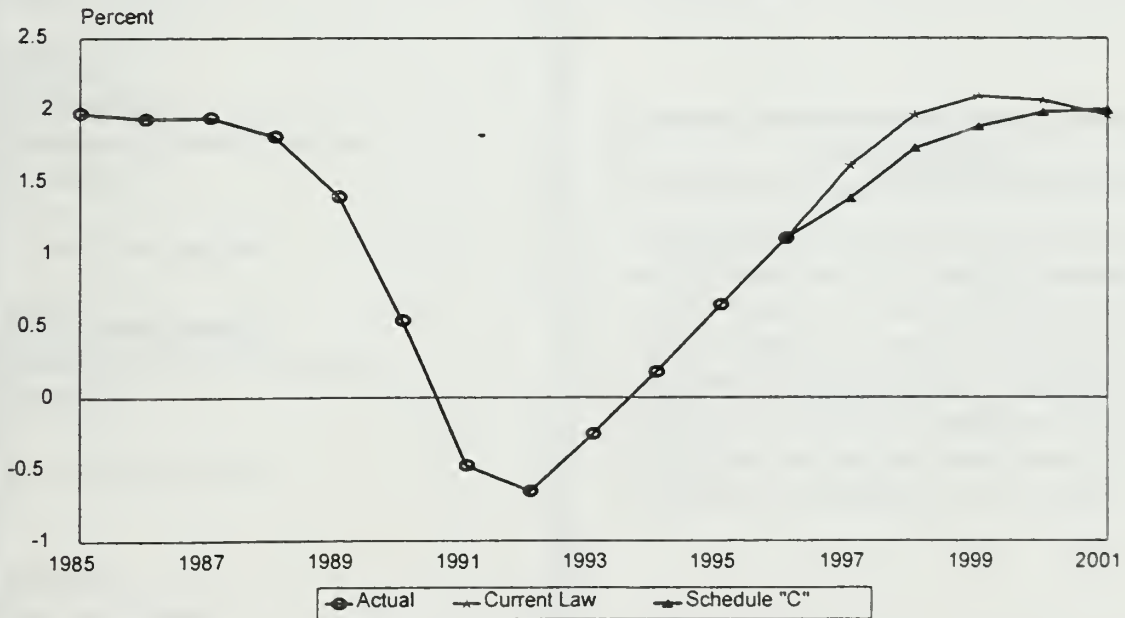
Figures may not add because of rounding.

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Balance in Dollars



Private Account Balance as a Percent of Massachusetts Total Wages







JUL 13 1997

QUARTERLY TRUST FUND REPORT

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QUARTERLY TRUST FUND REPORT

AUGUST 1997

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1998 Rate Agreement

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**THE UNEMPLOYMENT INSURANCE
TRUST FUND****CURRENT CONDITION OF THE FUND**

At the end of July 1997, the Massachusetts Unemployment Insurance Trust Fund balance was \$1.245 billion, with the private contributory account having a balance of \$1.188 billion, and the governmental contributory account holding a \$57 million balance.

1997 TO DATE

Through the end of June 1997, the private contributory account balance was \$1.147 billion, reflecting benefit outlays, income and interest slightly less than the previous estimates. For the first two quarters of 1997, total weeks compensated were less than the April estimates, but the average weekly benefit amount was slightly higher than that estimated in the April forecast, resulting in benefit outlays of \$397 million.

E Division of
Employment
and Training

This report is prepared by the Economic
Research Office of the Massachusetts
Division of Employment and Training. Any
questions can be directed to DET at (617)
626-6556

MEMORANDUM TO THE PRESIDENT

SUBJECT	REFERENCE
1. [Illegible text]	[Illegible text]
2. [Illegible text]	[Illegible text]
3. [Illegible text]	[Illegible text]
4. [Illegible text]	[Illegible text]

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in May 1997.

The assumptions from the DRI forecast are arrayed below and compared to the January 1997 and April 1997 trust fund report assumptions.

	WAGE & SALARY GROWTH (%)			TOTAL UNEMPLOYMENT RATE (%)		
	1/97	4/97	8/97	1/97	4/97	8/97
1997	4.6	6.8	7.2	4.2	3.9	4.0
1998	4.1	4.4	4.7	4.3	3.9	4.1
1999	4.1	4.1	4.7	4.3	4.0	4.1
2000	4.2	4.2	4.6	4.2	3.9	4.1
2001	4.1	4.1	4.3	4.3	4.1	4.2

	LABOR FORCE		
	1/97	4/97	8/97
1997	3,199,700	3,219,500	3,240,200
1998	3,224,600	3,243,500	3,278,000
1999	3,249,700	3,267,400	3,308,300
2000	3,273,500	3,288,500	3,335,300
2001	3,298,000	3,309,700	3,363,700

The current economic scenario differs from the April 1997 scenario in several ways. The labor force is expected to grow at a faster rate, especially during the earlier years of the forecast. The August forecast shows the labor force at 3,240,200 for 1997 and projects an increase of 123,500 between 1997 and 2001. The April forecast showed a 1997 labor force of 3,219,500, more than 20,000 less than the current forecast, and projected an increase of 90,200 over the four subsequent years.

Total wages and salaries are also expected to grow faster throughout the forecast period. The 1997 growth is projected at 7.2 percent compared to 6.8 percent in the April forecast. The current scenario shows an annual growth of 4.7 percent for the years 1998 and 1999, 4.6 percent for 2000 and 4.3 percent in 2001.

The total unemployment rate is expected to remain fairly steady throughout the duration of the forecast: 4.0 percent in 1997, 4.1 percent in 1998, 1999 and 2000, and 4.2 percent in 2001. The August forecast for each of the five years, was either 0.1 percentage point or 0.2 percentage point higher than was forecast in April.

1997 OUTLOOK

The simulation's estimate for continued weeks claimed is slightly higher than last year's level for the rest of 1997. Benefit payment outlays are projected to be \$720 million for 1997, slightly higher than last year and \$9 million more than the April estimate.

Employer contributions on Schedule E are expected to be \$1.113 billion, \$25 million less than the estimate of \$1.138 billion published in the April report, but \$66 million more than last year. The average contributory rate remains estimated at 4.3 percent. Contributions as a percent of total payroll are estimated to be 1.35 percent for 1997, the same as last year. The cost per employee estimate is \$488 for the private contributory account employers.

For 1997, income is expected to exceed benefit outlays by \$393 million. This income plus interest earnings on the trust fund account balance, estimated at \$77 million, will result in private contributory account reserves of \$1.309 billion by the end of the year. This estimate of reserves is \$40 million less than the previous estimate published in the April report. As of December 31, 1997, the trust fund account reserves would be 1.58 percent of total payroll.

The first part of the report deals with the general situation in the country. It is a very interesting and informative study of the country's development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's development.

The second part of the report deals with the economic situation. It is a very interesting and informative study of the country's economic development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's economic development.

The third part of the report deals with the social situation. It is a very interesting and informative study of the country's social development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's social development.

The fourth part of the report deals with the political situation. It is a very interesting and informative study of the country's political development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's political development.

The fifth part of the report deals with the cultural situation. It is a very interesting and informative study of the country's cultural development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's cultural development.

The sixth part of the report deals with the environmental situation. It is a very interesting and informative study of the country's environmental development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's environmental development.

The seventh part of the report deals with the future of the country. It is a very interesting and informative study of the country's future. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's future.

The eighth part of the report deals with the conclusion. It is a very interesting and informative study of the country's development. The author has done a great deal of research and has gathered a wealth of material. The report is well written and is a valuable contribution to the study of the country's development.

1998 - 2001 PROJECTIONS

In the absence of further legislation, the simulation estimates that under current law the private contributory account reserves would trigger Schedule "D" for employer contributions for 1998. Schedule "D" would generate \$1.016 billion in income during 1998, while the average cost per employee would be \$442. Employer contributions would then go to Schedule "C" for 1999 and 2000 and to Schedule "B" in 2001.

The slight increase in the economic assumptions for total unemployment used in this simulation increases the insured unemployment rate by 0.1 percent to 2.5 percent for the 1998 to 2001 forecast period. For 1998, the benefit outlays are expected to be \$788 million, \$34 million more than the estimate in the April report. The trust fund account reserves are estimated at \$2.055 billion at the end of 2001, 2.03 percent of total payroll. The 1998-2001 outlook is arrayed on Table 1.

**1998 RATE AGREEMENT
SCHEDULE "C"**

As this report was being prepared, the Governor and House and Senate legislative leadership from both political parties agreed that contribution rates for 1998 will be set by statute at Schedule "C". Legislation to accomplish this is expected to be enacted shortly after Labor Day. As shown on Table 1A, income from employer contributions will be \$919 million for 1998, \$97 million less than contributions under Schedule "D". The estimated average cost per employee of \$400 is a significant reduction from the current 1997 estimated average cost of \$488. Under Schedule "C", the simulation projects reserves in the private contributory account will be \$1.565 billion at the end of 1998, an increase of \$256 million over the expected 1997 ending balance.

The simulation indicates Schedule "C" would continue to remain in effect for employer contributions through the end of 2001. By the end of 2001, reserves are expected to be \$2.065 billion and the cost per employee is estimated to be \$367.

ORIGINAL ARTICLES

Observations on the Pathogenesis of the Common Cold
J. H. HAY, M.D., and J. S. TAYLOR, M.D.
From the Department of Pathology, University of Toronto, and the Department of Microbiology, St. Michael's Hospital, Toronto, Ontario, Canada.

The common cold is a disease of the upper respiratory tract, characterized by a variety of symptoms, including rhinorrhea, sneezing, and sore throat. The pathogenesis of the common cold has been the subject of much speculation, but the role of the virus in the disease has been established by a number of investigators.

The purpose of this study was to determine the role of the virus in the pathogenesis of the common cold. The results of the study are presented in the following sections.

REPORTS OF CASES

Case 1
A 35-year-old male patient presented with a 3-day history of rhinorrhea, sneezing, and sore throat. The patient had no fever and no other symptoms. The physical examination was normal. The patient was treated with symptomatic therapy and recovered within 7 days.

Case 2
A 45-year-old female patient presented with a 5-day history of rhinorrhea, sneezing, and sore throat. The patient had a low-grade fever and no other symptoms. The physical examination was normal. The patient was treated with symptomatic therapy and recovered within 10 days.

Case 3
A 25-year-old male patient presented with a 4-day history of rhinorrhea, sneezing, and sore throat. The patient had a low-grade fever and no other symptoms. The physical examination was normal. The patient was treated with symptomatic therapy and recovered within 8 days.

Table 1

Massachusetts Benefit Financing Simulation
 Net Effect of Current Law, Schedule "D" in 1998
 Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,309	\$1,665	\$1,871	\$2,036
INCOME	\$1,047	\$1,113	\$1,016	\$873	\$854	\$744
TRUST FUND INTEREST	\$40	\$77	\$128	\$155	\$172	\$182
OUTLAYS	\$717	\$720	\$788	\$822	\$861	\$907
BALANCE, DEC 31	\$839	\$1,309	\$1,665	\$1,871	\$2,036	\$2,055
SCHEDULE	D	E	D	C	C	B
AVERAGE COST/EMPLOYEE	\$455	\$488	\$442	\$378	\$367	\$318

Figures may not add because of rounding.

Table 2

Economic Assumptions Based on DRI Forecasts and Massachusetts
 Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$77.7	\$25.5	2,920	4.1%	32.8%	0.88%	1.35%	4.3%	2.6%
1997	\$82.6	\$26.3	2,924	4.3%	31.8%	0.77%	1.35%	4.0%	2.4%
1998	\$87.1	\$27.4	2,962	3.6%	31.5%	0.58%	1.17%	4.1%	2.5%
1999	\$91.8	\$28.0	2,989	3.1%	30.5%	0.46%	0.95%	4.1%	2.5%
2000	\$96.6	\$28.5	3,013	3.0%	29.5%	0.42%	0.88%	4.1%	2.5%
2001	\$101.4	\$29.1	3,038	2.5%	28.7%	0.41%	0.73%	4.2%	2.5%

Figures may not add because of rounding.

Table 1A

Massachusetts Benefit Financing Simulation
 Net Effect of Proposed Rate Agreement, Schedule "C" in 1998
 Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,309	\$1,565	\$1,765	\$1,936
INCOME	\$1,047	\$1,113	\$919	\$877	\$869	\$859
TRUST FUND INTEREST	\$40	\$77	\$125	\$145	\$163	\$177
OUTLAYS	\$717	\$720	\$788	\$822	\$861	\$907
BALANCE, DEC 31	\$839	\$1,309	\$1,565	\$1,765	\$1,936	\$2,065
SCHEDULE	D	E	C	C	C	C
AVERAGE COST/EMPLOYEE	\$455	\$488	\$400	\$379	\$374	\$367

Figures may not add because of rounding.

Table 2A

Economic Assumptions Based on DRI Forecasts and Massachusetts
 Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$77.7	\$25.5	2,920	4.1%	32.8%	0.88%	1.35%	4.3%	2.6%
1997	\$82.6	\$26.3	2,924	4.3%	31.8%	0.77%	1.35%	4.0%	2.4%
1998	\$87.1	\$27.4	2,962	3.3%	31.5%	0.58%	1.06%	4.1%	2.5%
1999	\$91.8	\$28.0	2,989	3.1%	30.5%	0.49%	0.96%	4.1%	2.5%
2000	\$96.6	\$28.5	3,013	3.0%	29.5%	0.45%	0.90%	4.1%	2.5%
2001	\$101.4	\$29.1	3,038	3.0%	28.7%	0.44%	0.85%	4.2%	2.5%

Figures may not add because of rounding.

Bayesian Inference for the Two-Sample Problem

James H. Berger, University of California, San Diego
David J. Berger, University of California, San Diego

Abstract. The two-sample problem is a classic problem in statistics. In this paper, we review the classical and Bayesian approaches to the two-sample problem. We discuss the advantages and disadvantages of each approach. We also discuss the use of the two-sample problem in the design of clinical trials.

KEY WORDS: Bayesian inference; Two-sample problem; Clinical trials.

1. INTRODUCTION

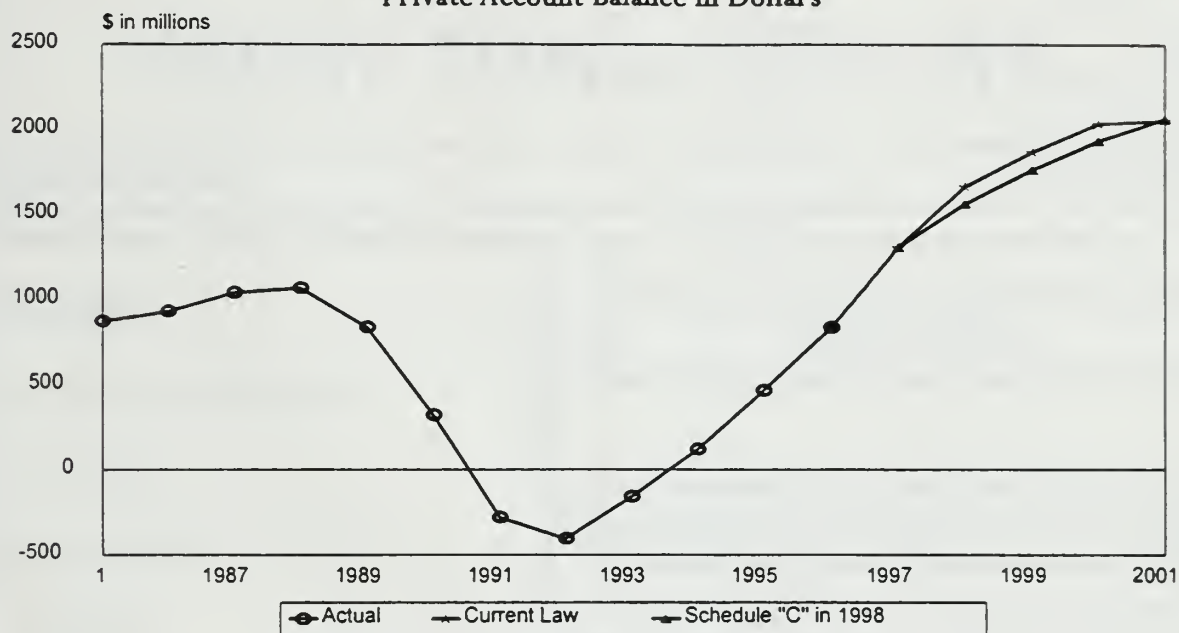
The two-sample problem is a classic problem in statistics. It arises in many different contexts, including the design of clinical trials, the analysis of experimental data, and the analysis of survey data. In this paper, we review the classical and Bayesian approaches to the two-sample problem. We discuss the advantages and disadvantages of each approach. We also discuss the use of the two-sample problem in the design of clinical trials.

1. CLASSICAL APPROACH

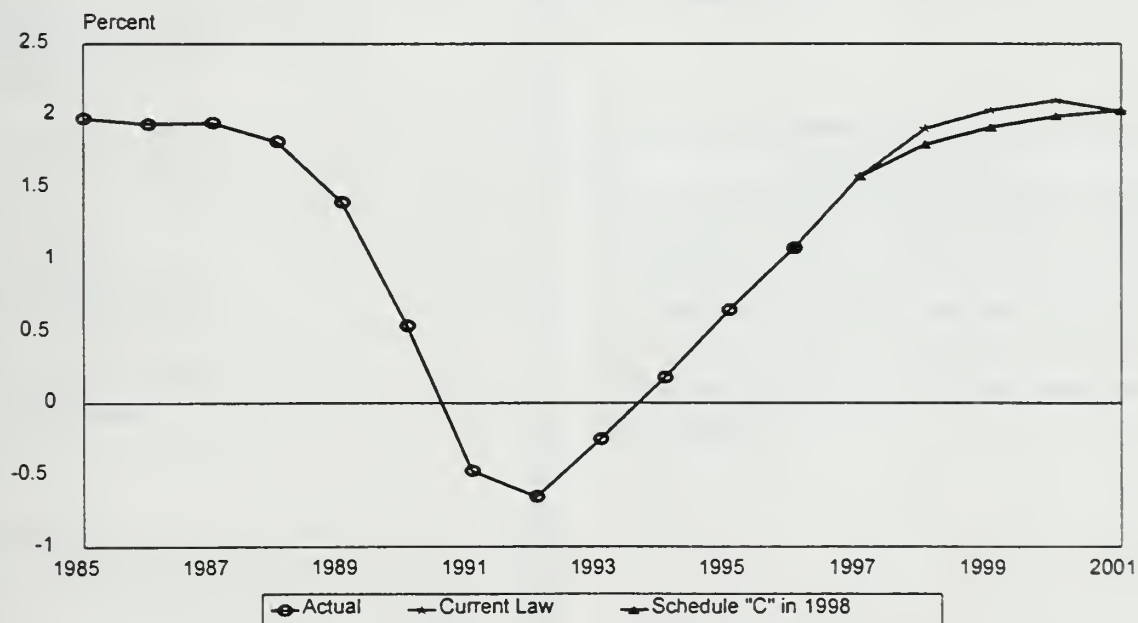
The classical approach to the two-sample problem is based on the frequentist theory of statistics. In this approach, the data are assumed to be a random sample from a population. The goal is to estimate the parameters of the population and to test hypotheses about the population. The classical approach is based on the use of point estimates and confidence intervals.

UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Balance in Dollars



Private Account Balance as a Percent of Massachusetts Total Wages





MASS. MA 2.20: 997/4

QUARTERLY TRUST FUND REPORT

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DET RESEARCH

OCTOBER 1997

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THE UNEMPLOYMENT INSURANCE TRUST FUND

CURRENT CONDITION OF THE FUND

At the end of September 1997, the Massachusetts Unemployment Insurance Trust Fund balance was \$1.343 billion, with the private contributory account having a balance of \$1.288 billion, and the governmental contributory account holding a \$55 million balance.

1997 TO DATE

Preliminary data for 1997 shows the private contributory account balance, revenues from employer contributions and benefit payments are in line with the simulations. Year to date claims activity, measured by continued weeks claimed, are the lowest since the pre-recession period.

E Division of
Employment
and Training

This report is prepared by the Economic Research Office of the Massachusetts Division of Employment and Training. Any questions can be directed to DET at (617) 626-6556.

ASSUMPTIONS USED IN THIS FORECAST

For this benefit financing simulation, DET has utilized the forecast produced by Data Resources Incorporated (DRI) in September 1997.

The assumptions from the DRI forecast are arrayed below and compared to the April 1997 and August 1997 trust fund reports.

	WAGE & SALARY GROWTH (%)			TOTAL UNEMPLOYMENT RATE (%)		
	4/97	8/97	10/97	4/97	8/97	10/97
1997	6.8	7.2	7.7	3.9	4.0	3.9
1998	4.4	4.7	5.1	3.9	4.1	3.8
1999	4.1	4.7	4.9	4.0	4.1	3.8
2000	4.2	4.6	4.8	3.9	4.1	3.8
2001	4.1	4.3	4.7	4.1	4.2	3.8

	LABOR FORCE		
	4/97	8/97	10/97
1997	3,219,500	3,240,200	3,235,100
1998	3,243,500	3,278,000	3,277,400
1999	3,267,400	3,308,300	3,316,700
2000	3,288,500	3,335,300	3,346,600
2001	3,309,700	3,363,700	3,377,300

The current economic scenario differs from the August 1997 scenario in several ways. The labor force is expected to grow at a slightly faster rate throughout the projected period. The October forecast shows the labor force at 3,235,100 for 1997 and projects an increase of 142,200 between 1997 and 2001. The August forecast showed a 1997 labor force of 3,240,200, about 5,000 more than the current forecast, but projected a smaller increase of 123,500 over the four subsequent years.

Total wages and salaries are also expected to grow faster throughout the forecast period. The 1997 growth is projected at 7.7 percent compared to 7.2 percent in the August forecast. The current scenario shows an annual growth of 5.1 percent for 1998 and a slightly lower growth rate each subsequent year, dropping to 4.7 percent by 2001. The August forecast showed annual growth from 0.2 to 0.4 percentage points lower for the years 1998-2001.

The total unemployment rate is expected to drop from 3.9 percent in 1997 to 3.8 percent in 1998 and then remain steady at 3.8 percent through 2001. The August forecast showed the unemployment rate at 4.0 percent in 1997, then rising very slowly to 4.2 percent in 2001.

Table 1 contains data for the annual activity for the private contributory account for the forecast period. Table 2 arrays the economic assumptions used in this benefit financing simulation.

1997 OUTLOOK

This simulation shows 1997 employer contributions should be \$1.129 billion, slightly higher than the estimate in the August report and 1.37% of total wages. Benefit payments are expected to be \$711 million, \$9 million less than the previous estimate. The year end trust fund account balance will be \$1.322 billion, an increase of \$483 million over 1996. DET considers this balance to be adequate and proper for 1998.

1998 - 2001 PROJECTIONS

The enactment of Chapter 100 of the Acts of 1997 in September established Schedule "C" for employer contributions for 1998. Schedule "C" will generate \$923 million in contributions during 1998, \$206 million less than the estimated revenue for 1997 and reduce the average cost per employee to \$402. A slight increase in weeks claimed and a higher average weekly benefit amount is projected to increase benefit payments to \$753 million, resulting in a balance of \$1.573 billion on December 31, 1998.

The simulation estimates that Schedule "C" will trigger for 1999, 2000 and 2001. Employer contributions would exceed benefit payments for the duration of the forecast period. The average cost per employee would continue to decline, dropping to \$372 in 2001. Interest rates, expected to remain low during the period, generate additional revenues and allow the private contributory account balance to reach \$2 billion by the end of calendar year 2001.

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The first part of the paper discusses the importance of the study and the objectives of the research. It also mentions the scope of the study and the limitations of the study.

The second part of the paper discusses the methodology used in the study. It mentions the data collection methods and the data analysis methods.

The third part of the paper discusses the results of the study. It mentions the findings of the study and the conclusions drawn from the study.

The fourth part of the paper discusses the implications of the study. It mentions the practical implications of the study and the theoretical implications of the study.

The fifth part of the paper discusses the limitations of the study. It mentions the limitations of the study and the limitations of the study.

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The seventh part of the paper discusses the conclusion. It mentions the conclusion of the study and the conclusion of the study.

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Table 1

Massachusetts Benefit Financing Simulation
Private Contributory Trust Fund Account (All \$ in Millions)

	1996	1997	1998	1999	2000	2001
BALANCE JAN 1	\$469	\$839	\$1,322	\$1,573	\$1,750	\$1,893
INCOME	\$1,047	\$1,129	\$923	\$887	\$877	\$874
TRUST FUND INTEREST	\$40	\$65	\$81	\$91	\$97	\$104
OUTLAYS	\$717	\$711	\$753	\$801	\$831	\$871
BALANCE, DEC 31	\$839	\$1,322	\$1,573	\$1,750	\$1,893	\$2,000
SCHEDULE	D	E	C	C	C	C
AVERAGE COST/EMPLOYEE	\$455	\$497	\$402	\$382	\$376	\$372

Figures may not add because of rounding.

Table 2

Economic Assumptions Based on DRI Forecasts and Massachusetts Simulation
Benefit Financing Simulation Output:

Year	Total Covered Payroll (billions)	Contributory Payroll (billions)	Covered Employment (thousands)	Effective Contribution Rate	Contributory Wage Proportion	Solvency Assessment	Employer Contributions a % of Total Payroll	Total Unemployment Rate	Insured Unemployment Rate
1996	\$77.7	\$25.5	2,921	4.1%	32.8%	0.88%	1.35%	4.3%	2.6%
1997	\$82.6	\$26.8	2,934	4.3%	32.4%	0.79%	1.37%	3.9%	2.3%
1998	\$87.8	\$27.5	2,964	3.3%	31.3%	0.68%	1.05%	3.8%	2.4%
1999	\$93.0	\$28.2	2,999	3.2%	30.3%	0.66%	0.95%	3.8%	2.4%
2000	\$98.1	\$28.8	3,026	3.1%	29.4%	0.64%	0.89%	3.8%	2.4%
2001	\$103.4	\$29.4	3,054	3.0%	28.4%	0.65%	0.85%	3.8%	2.4%

Figures may not add because of rounding.

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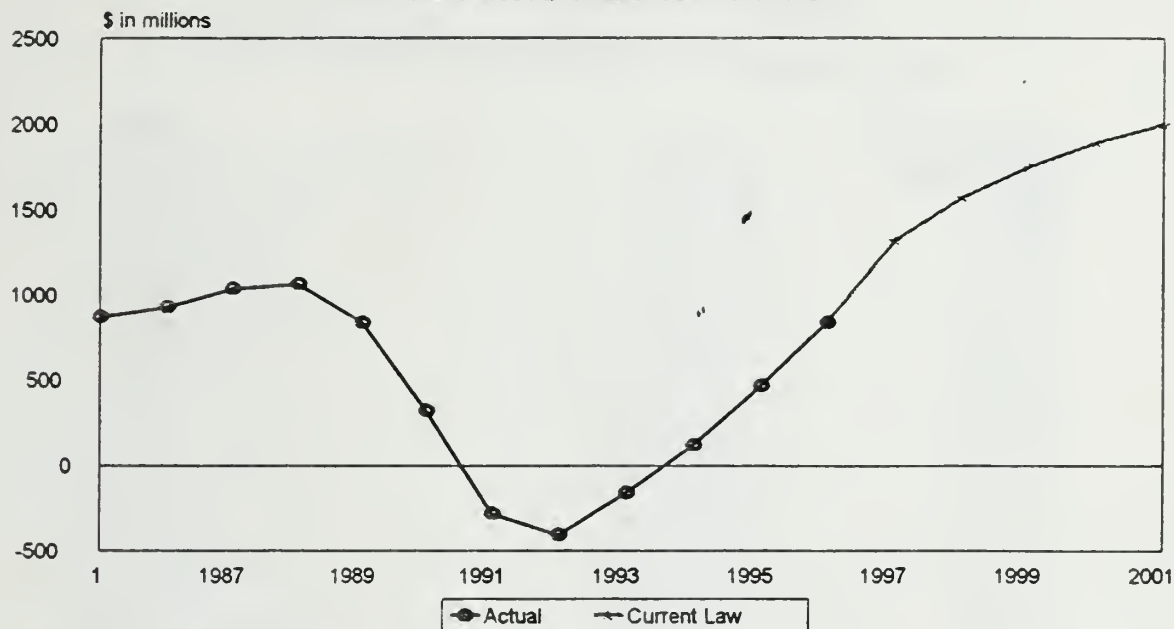
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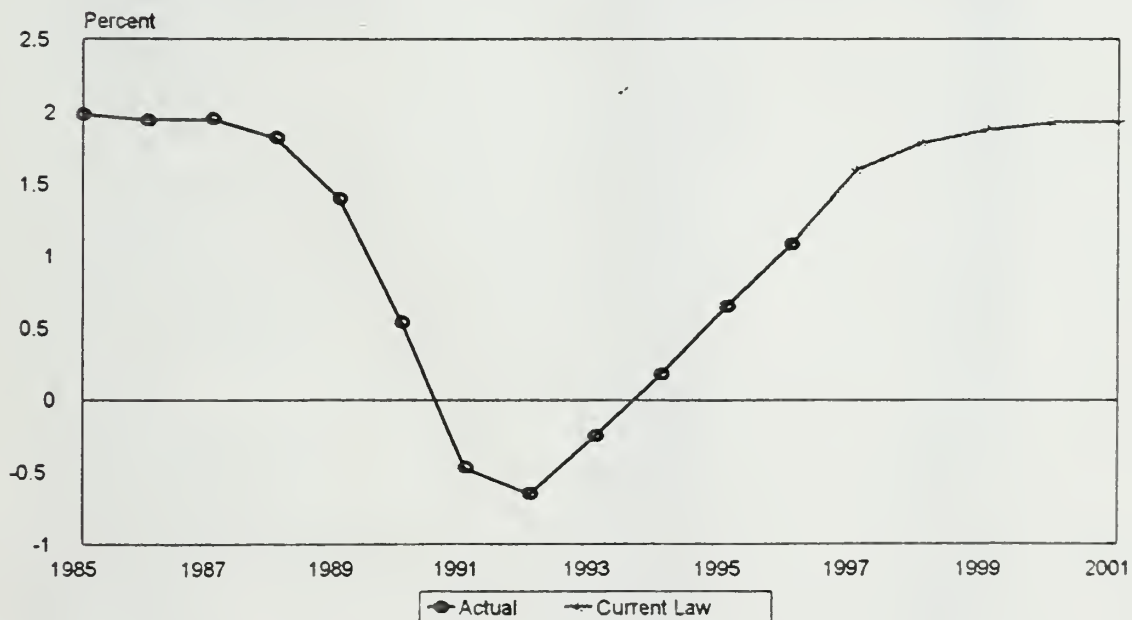
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UNEMPLOYMENT INSURANCE TRUST FUND BALANCE

Private Account Balance in Dollars



Private Account Balance as a Percent of Massachusetts Total Wages





SOLVENCY OF STATE TRUST FUNDS
DECEMBER 31, 1996 TRUST FUND BALANCES

State	Balance	As Percent of Total Wages
VIRGIN ISLANDS	\$42,069	4.24%
PUERTO RICO	\$595,709	3.92%
VERMONT	\$218,259	3.40%
WYOMING	\$147,087	3.17%
LOUISIANA	\$1,131,152	2.71%
NEW MEXICO	\$385,531	2.61%
ALASKA	\$194,188	2.53%
MISSISSIPPI	\$553,222	2.47%
OREGON	\$941,419	2.44%
UTAH	\$523,880	2.42%
WISCONSIN	\$1,556,922	2.41%
IDAHO	\$266,228	2.41%
DELAWARE	\$258,468	2.33%
IOWA	\$718,845	2.31%
KANSAS	\$651,074	2.28%
WASHINGTON	\$1,332,508	2.00%
OKLAHOMA	\$563,895	1.94%
NEVADA	\$348,278	1.90%
NEW HAMPSHIRE	\$268,011	1.83%
MONTANA	\$125,900	1.82%
INDIANA	\$1,273,086	1.79%
GEORGIA	\$1,634,073	1.77%
NEW JERSEY	\$2,028,818	1.63%
HAWAII	\$211,267	1.56%
SOUTH CAROLINA	\$603,410	1.56%
NORTH CAROLINA	\$1,335,565	1.53%
PENNSYLVANIA	\$2,031,947	1.40%
MICHIGAN	\$1,830,928	1.38%
TENNESSEE	\$826,526	1.34%
KENTUCKY	\$501,304	1.31%
ARIZONA	\$627,059	1.30%
FLORIDA	\$1,947,557	1.27%
OHIO	\$1,750,968	1.24%
MARYLAND	\$690,786	1.15%
ALABAMA	\$483,472	1.13%
VIRGINIA	\$897,198	1.13%
* MASSACHUSETTS	\$839,352	1.08%
NEBRASKA	\$195,210	1.06%
WEST VIRGINIA	\$157,345	1.04%
RHODE ISLAND	\$116,240	1.02%
COLORADO	\$510,956	1.00%
ILLINOIS	\$1,638,560	0.96%
MAINE	\$112,122	0.92%
ARKANSAS	\$202,784	0.89%
NORTH DAKOTA	\$50,072	0.85%
MINNESOTA	\$513,033	0.77%
SOUTH DAKOTA	\$49,542	0.76%
CALIFORNIA	\$2,877,452	0.71%
DISTRICT OF COLUMBIA	\$99,368	0.60%
** CONNECTICUT	\$277,861	0.49%
MISSOURI	\$307,507	0.48%
TEXAS	\$642,233	0.29%
NEW YORK	\$470,400	0.17%

* Massachusetts trust fund balance and total wages reflect the private contributory account only.

** Connecticut trust fund balance excludes a bonded debt, with a balance of \$746 million, which was used to pay UI benefits.

SOURCE: U.S. Department of Labor, Employment and Training Admin., Division of Actuarial Services



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